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Contents

Abstract

This paper looks at the role of governance and institutions in supporting growth and broadening inclusiveness with a special reference to developing Asia. While the intrinsic value of good governance and institutions as ends of development in their own right is now universally accepted and underlies the very notion of inclusiveness, their instrumental value as a means toward better growth performance and more equal income distribution is still not well understood—despite the emergence of a large literature. This paper provides a review of this still growing literature, and, in the process, takes a close look at two critical issues that have attracted a great deal of attention: the measurement of governance and institutional quality, and direction of causality between institutional development and economic development. The paper then examines where developing Asia stands in various widely used measures of governance/institutional quality relative to the rest of the world, and the power of governance indicators in explaining cross-country variations in growth performance and income inequality in the region.

The paper argues that given its intrinsic value and positive association with the level of development, good governance should be pursued in all dimensions as a basic development goal. To maximize its instrumental value, the current literature points to the need for recognizing the context-specific nature of the linkages between governance and institutional quality, on one hand, and growth and inequality, on the other, and for focusing on the aspects that are most binding and critical to a country's development in a particular period. The empirical analysis shows that developing Asian economies with government effectiveness, regulatory quality, and rule of law scoring above the global means (after controlling for per capita income) in 1998 grew faster on average during 1998-2008 (by 1.6, 2.0, and 1.2 percentage points annually, respectively) than those economies scoring below the global means. On the basis of these findings, the paper argues that improving governance in these dimensions could be used as potential entry points of development strategies for many countries in the region. The paper also highlights the need for more efforts to improve the measurement of governance and institutional quality and more research to better understand the complex relationships between institutional and economic developments.

I. Introduction

The essentiality of good governance and institutions has been a key focus in development policy discussions in recent years. While their intrinsic value as ends of development in their own right is now universally accepted, their instrumental value as a means toward better growth performance and more equal income distribution, and how this translates into short-to-medium-term policy priorities, especially for institutionally weaker and low-income countries, is still not well understood—despite the emergence of a considerable and still growing body of literature (Rodrik 2008). The first objective of this paper is to provide a brief review of this literature as part of an ongoing search for the "deep determinants" of economic growth and development. In the process, the paper takes a close look at two critical issues that have attracted a great deal of attention: the measurement of governance and institutional quality, and the direction of causality between institutional development and economic development.

Economic growth in developing Asia in recent decades has been nothing short of impressive. For the region as a whole, per capita gross domestic product (GDP) in 2005 purchasing power parity (PPP) terms increased from $1,403 to $3,174 between 1990 and 2005, growing at an annual rate of 5.6%, a pace with few parallels globally and in history. This has led to substantial reductions in extreme poverty: the incidence of poverty measured at $1.25 a day declined from 52% to 27%, and at $2 a day from 79% to 54%. However, economic success on such a massive scale has not been uniform across the region. Growth has largely been driven by the People's Republic of China (PRC), India, and several Southeast Asian countries. In many parts of Asia, growth has been slow, increases in per capita income have been limited, and the incidence of extreme poverty remains high.

Globally, income growth has been effective in reducing absolute poverty, but less so in reducing inequality. In Asia, although spells of growth have raised incomes for all sections of the population in most countries, inequality has also increased, both in income and in nonincome dimensions such as access to education and health services. This has occurred even in the high-performing economies. As a result, there is a growing realization among policymakers around the region that further progress in achieving broad development goals may be possible only if the character of economic growth itself is changed toward promoting greater inclusiveness. This

means not only the sustained generation of new productive opportunities, but also broad access to those opportunities (Ali and Zhuang 2007). The concept of inclusive growth is increasingly being embraced in the region.

Against this background, the second objective of this paper is to examine where Asia stands in various widely used measures of governance/institutional quality relative to the rest of the world, to what extent certain aspects have been more relevant than others in driving the region's recent growth and changing income inequality, and what these mean for policy formulation in pursuing inclusive growth. Many Asian countries have sometimes been considered as "outliers" when one looks at the governance/institutions–growth nexus. The paper investigates to what extent this is the case and its possible explanations.

The rest of this paper is structured as follows. Section II reviews the literature on governance and institutions, starting from the new institutional economics (NIE) pioneered by Douglas North (1981, 1990, and 2005) to the more recent attempts to measure governance and institutional quality. In Section III, the paper first looks at where Asia stands in the six composite governance indicators published regularly by the World Bank, including voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption; it then estimates governance "surplus" or "deficit" in each of these indicators for each developing Asian economy, and looks at whether or not developing Asian economies with governance in surplus in a particular indicator grow faster and have lower income inequality than economies with governance in deficit in the same indicator. Finally, Section IV summarizes key findings and concludes the paper.

II. Governance/Institutions vis-à-vis Growth and Inequality: A Literature Review

A. Searching for Deep Determinants of Growth

The current concern in the economics literature over the role of governance and institutions (as well as geography, culture, etc.) can be viewed as part of an ongoing search for the "deep determinants" of economic growth and development. To a large extent, this can be traced to a growing dissatisfaction beginning in the late 1980s with what was until then the preeminent "neoclassical" growth model introduced in the 1950s by Solow (1956) and Swan (1956). The standard neoclassical growth model identifies capital accumulation or investment as the central factor in explaining levels of per capita income. Successive attempts to test the neoclassical model empirically, however,

turned up ambiguous results at best. This led to a reconsideration of the concept of the "factors of production" to include human capital (Becker 1962) and, in the late 1980s and early 1990s, the development of endogenous growth models to incorporate the level of technology and rate of innovation (Grossman and Helpman 1991).

At a more fundamental level, however, it can be said that all growth models hitherto fail to answer truly *causal* questions. Even if capital accumulation or technological innovation accounts for significant differences in long-run levels of per capita output across countries, the question remains why certain societies succeeded while others failed to take the actions necessary to accomplish such accumulation or innovation. North and Thomas (1973) argue that the factors listed (innovation, economies of scale, education, capital accumulation, etc.) are not causes of growth; they *are* growth. It is in this sense, therefore, that existing growth models have elucidated only the "mechanics" or "correlates" of growth, but have not truly touched on its deep determinants.

Against this background, a new stream of the economics literature has emerged as part of the continued search for deep determinants, known as the new institutional economics (NIE), proceeding primarily from the work of Douglass North (North and Thomas 1976; North 1981, 1990, and 2005). The NIE attempts to extend neoclassical economics by incorporating institutional analysis, focusing on the role of institutions in explaining long-term economic performance. North defines institutions as "rules of the game", that is, the human-devised formal and informal constraints that shape human interactions. Formal institutions refer primarily to constitutions, statutes, and explicit government rules and regulations, codified and enforced by impersonal mechanisms—most importantly, the state with its coercive power and organization. Informal institutions or constraints, on the other hand, include unwritten rules such as traditions, norms and codes of behavior, taboos, and other social mechanisms based on and enforced through interpersonal ties and relations.

Some interpret North's earlier work, based on the history of Western Europe and the United States, as suggesting a unidirectional progression from informal to formal institutions. Aron (2000), for example, writes that North describes a continuum, with unwritten taboos, customs, and traditions at one end, and constitutions and law governing economics and politics at the other; in the absence of formal rules, a dense social network leads to the development of customs, trust, and normative rules that constitute an informal institutional framework; with economic development comes a unidirectional move along the continuum, as increasing specialization and the division of labor associated with more complex societies raise the rate of return to formalizing political, judicial, and economic rules and contracts that facilitate political or economic exchanges.

The NIE's emphasis on impersonal and impartial institutions derives from the central importance of affirming and protecting property rights and contracts, which allows the extension of market exchange, investment, and innovation over wider economic spheres

and geographic areas at a reasonably low cost.[1] Predictable contract enforcement and property rights protection are particularly important for transactions beyond simple face-to-face and spot exchange, which are otherwise fraught with uncertainty and possible opportunism because of the separation in space or time, and, consequently, entail significant transaction costs. For this reason, effective enforcement of rules and sanctions against violation is needed. Only with sanctions would institutions make the actions of individuals predictable (Kasper and Streit 1998).

In the continuum argument, effective sanctions come to support growth only when embodied in the government of a state. The implicit assumption is that only such an extensive organization is capable of internalizing the scale economies inherent in defining rules and has the implicit monopoly of coercive power needed to enforce the rules. Endowing the state with overarching power, on the other hand, creates the opposite problem of possible bias, opportunism, corruption, and usurpation in the discharge of state power by those in leadership positions. Weingast (1993) argues that a government strong enough to protect property and enforce contracts is also strong enough to confiscate the wealth of its citizens. This inherent paradox provides the rationale for accountability and transparency, checks and balances, and wide participation of various organizations as part of the requirements for social order and control.

Thus, according to this framework, accountability, rule of law, political stability, bureaucratic capability, property rights protection and contract enforcement, and control of corruption are mutually reinforcing aspects of growth-enhancing institutions. From this broad theoretical argument follows a hypothesis that societies that fail to establish such formal institutions effectively would be faced with very high costs in market transactions and would be unable to control the “grabbing hand of the state”, and, consequently, to support private initiatives, market exchanges and investments, and economic development. The above line of reasoning, however, does not preclude the possibility of a reverse causality. In fact, an alternative view, supported by empirical evidence, predicts that a higher level of development will generate the need for and lead to better institutions (Paldam and Gundlach 2008).

Even though North himself drew a distinction between formal and informal institutions, the NIE literature since his original work has focused largely on the role of formal institutions. More recently, however, there has been growing interest in understanding how informal institutions contribute to economic development. Lauth (2005), for instance, looks at how informal and formal institutions interact with each other in a society by distinguishing among three types of relationship: *complementary*, when informal and formal institutions coexist side by side and mutually reinforce and support each other; *substitutive*, when formal institutions are ineffective and informal institutions play a functionally equivalent role, or vice versa; and *conflicting*, when the two systems of rules

[1] Much of this summarizes the argument in North (1981 and 1990) and North, Wallis, and Weingast (2006) as well as drawing from Greif (2005).

are incompatible. Empirical evidence suggests that informal institutions can explain part of the cross-country differences in economic performance (see, for example, Knowles 2005; Knowles and Weatherston 2006; and Easterly, Ritzen, and Woolcock 2006).

The concepts emphasized in the informal institutions literature also feature in the social capital literature.[2] Interest in how social capital is linked with economic development began largely after the seminal work of Coleman (1988) and Putnam (1993). Coleman characterizes social capital as social organization that facilitates the achievement of goals that could not be achieved in its absence or could be achieved only at a higher cost. Putnam defines social capital as features of social organization such as trust, norms, and networks that can improve the efficiency of society. Many different definitions of social capital have emerged since (Durlauf and Fafchamps 2005). Noting that most of these definitions include the notions of trust, cooperative norms, and networks/associations within a society, Knowles (2005) argues that social capital is a notion similar to what North (1990) defines as informal institutions.[3] Rauf (2009) argues that informal institutions are responsible for generating social capital, and social capital captures impacts of informal institutions.

A major hypothesis in the social capital literature is that social capital improves economic performance by reducing transaction costs and encouraging cooperation, a point also made by North with regard to informal institutions. Knowles (2005) summarizes the key channels through which social capital may contribute to economic growth: (i) increasing the number of mutually beneficial trades, (ii) solving collective action problems, (iii) reducing monitoring and transaction costs, and (iv) improving information flows. But the literature also acknowledges cases where social capital can have negative effects: customs or norms could sometimes *hinder* the introduction of new techniques; social networks and associations may provide benefits for members (insiders) at the expense of nonmembers (outsiders), and so on. Durlauf and Fafchamps (2005) argue, on the basis of an extensive survey, that while the social capital literature has produced many insights, a number of conceptual and statistical problems exist in the current use of social capital by social scientists.

B. From Institutions to Governance

Alongside these theoretical developments, accumulated experience among international development agencies shows that structural adjustment programs and macroeconomic stabilization plans based on external assistance often fail or are stymied by intervening political factors. This has led to efforts to enquire into the political environment and the processes that influence policy implementation, beyond the design and content of

2 As well as the culture-economics literature.

3 Knowles (2005) notes that although North (1990) is frequently cited by researchers in both the social capital literature and the NIE literature, neither group of researchers tends to acknowledge the work of the other.

policy itself. A stream of empirical studies point to how the effectiveness of external assistance depends not only on the nature of the policies pursued, but also on the nature of government (e.g., Burnside and Dollar 2000). On the basis of some empirical observations, for example, Easterly (2006) argues that countries pursuing destructive policies such as high inflation, high black market premiums, and chronically high budget deficits may miss out on growth; but it does not follow that one can create growth simply with macroeconomic stability. The involvement of larger structures in the determination of policy, its implementation, and outcomes is the entry point for "governance".

Governance, according to the Oxford English Dictionary, is the "manner or way of governing". The root—govern—derives from the Greek "κυβερναν"(kyvernan) for "steer", e.g., to steer the "ship of state". More recently, the use of the term gained ground as various researchers and groups used the word with varying connotations. At one end, governance has been used to refer to entire systems of political institutions and traditions; at the other, the phrase "governance issues" has sometimes become a euphemism for corruption. In the economics and development literature, however, the spread of the term governance arose from the need to extend the analysis beyond the design of government policy to political process and behavior.

The current use of the governance concept may be traced to a World Bank study (1989) on Africa that defined governance as "the exercise of political power to manage a nation's affairs". Later, the World Bank (1992) defined governance as "the manner in which power is exercised in the management of a country's economic and social resources for development". The Organisation for Economic Co-operation and Development (OECD), on the other hand, defined governance as "the exercise of authority in government and the political arena". According to this definition, "*Good* public governance helps to strengthen democracy and human rights, promote economic prosperity and social cohesion, reduce poverty, enhance environmental protection and the sustainable use of natural resources, and deepen confidence in government and public administration" (Tarschys 2001, 28).

Huther and Shah (1996) explicitly linked governance to the notion of institutions, defining it as "all aspects of the exercise of authority *through formal and informal institutions* in the management of the resource endowment of a state." This was carried through the work of Kaufmann, Kraay, and Zoido-Lobatón (KKZ 1999) and Kaufmann, Kraay, and Mastruzzi (KKM 2003). KKZ/KKM advanced a working definition of governance: the *traditions and institutions* by which authority in a country is exercised. This led to what is now probably the most widely used set of governance indicators, measuring (i) the process by which those in authority are selected, monitored and replaced; (ii) the capacity of the government to effectively formulate and implement sound policies and provide public services; and (iii) the respect of citizens and the state for the institutions that govern economic and social interactions among them.

It has been suggested that, prior to this, governance as a concept was theoretically weak, since it provided neither typology, nor metric, nor direction of development. For this reason, "good governance" tended to be reduced to a tautological evaluation of outcomes or results rather than an analysis of its organic elements and the means by which it might be achieved. With its explicit reference to institutions, however, the governance idea became associated with the emerging stream of the NIE, lending theoretical support to a concept that had heretofore been primarily developed by practitioners.

C. Measuring Governance/Institutional Quality

A significant and growing amount of empirical work has sought to substantiate the expected governance/institutions–growth nexus described in the previous section. Such empirical work has typically involved cross-country regression exercises linking per capita income growth (as the dependent variable) with measures of governance/institutional quality (as explanatory variables), while controlling for other variables that may also affect per capita income growth. This type of empirical study has, however, often been criticized for its methodological weaknesses. The two most discussed issues are the measurement of governance/institutional quality and the direction of causality between institutional development and economic performance.

Barro (1991), among the first to conduct cross-country regression exercises, used an objective count of instances of political instability such as coups d'etat, political assassinations, and revolutions to proxy the threat to the security of property rights. Subsequent authors such as Mauro (1995) and Knack and Keefer (1995) used indicators drawn from *subjective* expert assessments, particularly those produced by investment consulting firms, such as the Political Risk Services group (which produces the International Country Risk Guide [ICRG]),[4] the Business Environmental Risk Intelligence (BERI), and so on.

At the same time, the growing importance attached to good governance and institutions stimulated empirical research aimed at measuring governance by think tanks, multilateral agencies, and nongovernment organizations (NGOs), leading to the publication of a large number of governance indicators series (see Box 1). Among these, the most popular and widely used today are the Worldwide Governance Indicators (WGIs) produced by the World Bank—stemming from the work of KKZ/KKM. The WGIs are based on about 30 opinion/perception-based surveys of various governance measures from investment consulting firms (such as those described above), NGOs, think tanks, governments, and multilateral agencies, and classified into six clusters (KKM 2009):[5]

[4] As an example, the ICRG rating comprises 22 variables in three subcategories of risk: political, financial, and economic. The political risk index is based on expert assessments of 12 political risk components on numerical scales: government stability (0–12), socioeconomic conditions (0–12), investment profile (0–12), internal conflict (0–12), external conflict (0–12), corruption (0–6), military in politics (0–6), religious tensions (0–6), law and order (0–6), ethnic tension (0–6), democratic accountability (0–6), and bureaucratic quality (0–4). The scores are added to arrive at a total "political risk" rating (1–100), where the higher the score, the lower the risk (see https://www.prsgroup.com/ICRG_Methodology.aspx).

[5] The latest WGIs, released in 2009, are based on 35 different data sources from 33 organizations around the world, aggregating the data from hundreds of disaggregated questions and covering 212 countries (KKM 2009).

(i) *Voice and Accountability,* measured by the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, association, and the press

(ii) *Political Stability and Absence of Violence,* measured by the likelihood that the government will be destabilized by unconstitutional or violent means, including terrorism

(iii) *Government Effectiveness*, measured by the quality of public services, the capacity of the civil service and its independence from political pressures, and the quality of policy formulation

(iv) *Regulatory Quality*, measured by the ability of the government to provide sound policies and regulations that enable and promote private sector development

(v) *Rule of Law*, measured by the extent to which agents have confidence in and abide by the rules of society, including the quality of property rights, the police, and the courts, as well as the risk of crime

(vi) *Control of Corruption,* measured by the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as elite "capture" of the state

Box 1: Major Indicators of Governance and Institutional Quality

The growing importance attached to good governance and high-quality institutions has stimulated empirical research aimed at measuring governance, leading to the publication of a large number of governance indicators series.

The most popular and widely used today are the *Worldwide Governance Indicators* (WGIs)—first released by the World Bank in 1996. Sometimes 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. The WGIs consist of composite indicators of six key dimensions of governance: (i) voice and accountability, (ii) political stability and absence of violence, (iii) government effectiveness, (iv) regulatory quality, (v) rule of law, and (vi) control of corruption.

Another indicator widely quoted in the media and academic research is the *Global Competitiveness Index* (GCI) produced by the World Economic Forum with Columbia University, covering 134 countries. First introduced in 2004, this index measures national competitiveness, taking into account macro and micro foundations of national competitiveness. A total of 113 variables are aggregated into a weighted average of 12 pillars, including institutions, infrastructure, macroeconomy, health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market sophistication, technological readiness, market size, business sophistication, and innovation.

continued.

Box 1: *continued.*

Based on expert assessments, the *World Governance Assessment* of the Overseas Development Institute attempts to establish how the quality of governance varies over time in countries around the world. The pilot phase covered 16 countries, while phase 2 covered 10. Thirty indicators are used for six dimensions of governance—civil society, interest aggregation, government stewardship, policy implementation, economic society, and dispute resolution.

Transparency International's *Corruption Perceptions Index*, first introduced in 1995, measures the perceived levels of public sector corruption for 180 countries. The index is calculated using data from 13 sources from 11 independent institutions, including risk agencies/country analysis.

Used by the United States's Millennium Challenge Corporation and the World Bank in its Country Policy and Institutional Assessment, among others, *the Global Integrity Index* assesses the opposite of corruption: existence and effectiveness of and citizen access to key governance and anticorruption mechanisms. The index aggregates more than 300 integrity indicators, organized into six main governance categories—civil society, public information and media; elections; government accountability; administration and civil service; oversight and regulation; anticorruption and rule of law—and subcategories.

Covering 141 countries, the Fraser Institute's *Economic Freedom of the World* index measures the degree to which a nation's policies and institutions are supportive of economic freedom, the cornerstone of which are personal choice, voluntary exchange, freedom to compete, and security of privately owned property. First introduced in 1986, the index aggregates 42 variables gathered from external sources as the International Monetary Fund, World Bank, and World Economic Forum. The index measures the degree of economic freedom in five areas, such as size of government; legal structure and security of property rights; access to sound money; freedom to trade internationally; and regulation of credit, labor and business.

The *Economic Freedom Index*, produced by the Heritage Foundation and The Wall Street Journal, was first introduced in 1995 and now covers 162 countries. The index measures and aggregates 10 individual freedoms, which are vital to the development of personal and national prosperity—business freedom, trade freedom, fiscal freedom, government size, monetary freedom, investment freedom, financial freedom, property rights, freedom from corruption, labor freedom—into a simple overall score. The entire series is revised for consistency each time changes in methodology are instituted.

First introduced in 1972, the Freedom House's *Freedom in the World Country Ratings* measures the degree of democracy and political freedom in 193 countries and 15 related/disputed territories. Country scores by experts are transformed into indexes of political rights (electoral process, political pluralism and participation, functioning of government) and civil liberties (freedom of expression and belief, associational organizational rights, rule of law, personal autonomy and individual rights), which are then averaged to show an overall freedom rating. Depending on the ratings, nations are classified as "Free", "Partly Free", or "Not Free".

For other indicators, readers can refer to the United Nations Development Programme's user's guide on governance indicators (2007). The guide contains basic information on 35 governance indicator sources, including methodology, example of results, valid/invalid uses, and assumptions.

Source: Arndt and Oman (2006), UNDP (2007), websites of various indexes.

For each economy, the various component indicators in each cluster are rescaled and aggregated, using an unobserved-components method, to yield a value centered at zero and ranging from –2.5 to 2.5, with larger positive values indicating better governance.

Despite their popularity and wide application in empirical studies, subjective and perception-based governance indicators have been subject to various criticisms, with many urging a more circumspect and critical use of these indicators. Owing to their wide following and influence, the WGIs have understandably come in for the closest scrutiny. Kaufmann and Kraay (2008) summarize the major critiques into those related to (i) issues concerning comparability over time and across countries,[6] (ii) biases in expert assessments,[7] (iii) correlated perception errors, (iv) definitional issues,[8] and (v) reliance on "subjective" data.[9] Admitting that measuring governance is difficult, and that all measures of governance are necessarily imprecise, subject to margins of error, and require interpretative caution, they acknowledge that there is scope for developing new and better indicators of governance to address some of the noted weaknesses of the existing measures (Kaufmann and Kraay 2008, KKM 2009).

D. Empirical Evidence and the Issue of Causality

Barro (1991) finds that political instability, proxied by the frequency of coups d'etat, political assassinations, and revolutions, had a significant and negative impact on per capita GDP growth during 1965−1985, after controlling for other variables suggested by the standard growth model. Several subsequent studies using indicators drawn from *subjective* expert assessments confirm Barro's findings. Reestimations of Barro's model explaining growth of per capita GDP show the "rule of law" variable to be particularly potent, suppressing the effects of other governance variables such as corruption and quality of the bureaucracy (Barro and Sala-i-Martin 1995). On the other hand, Mauro (1995) finds bureaucratic quality to be significant in a growth equation, even while corruption is not. Seeking to capture contract enforcement and property rights protection, Knack and Keefer (1995) represent governance as a single 50-point composite index culled from a subset of the ICRG data set. Regressed against investment ratios, this construct is found to be significantly positive in a Barro-type growth equation using cross-section data—an improvement of one standard deviation raising growth of per capita output by 1.2 percentage points. The World Bank (2007) cites that an improvement in

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6 The critiques include (i) unsuitability for cross-country and over-time comparison due to the use of different sets of underlying data sources in different years; (ii) inability to detect changes in a country's governance performance over time due to the construction of each component across countries: any movement of a country's indicator through time reflects only changes in its relative position on the scale of all included countries, regardless of whether the quality of governance *per se* has improved or not; and (iii) substantial margins of error in the aggregate WGIs.

7 It has been suggested that the large role of expatriate opinions in the primary sources is likely to color their assessments with the culture of the respondent's home (e.g., Western industrialized) country; or then again organizations responsible for these primary sources may profess strong ideological opinions that permeate the formulation of questions. NGO sources may have a stringent view of the needed accountability and access, while business-oriented organizations and business people themselves may have a bias against most forms of government intervention.

8 As an example, the WGI corruption score lumps together and equally weights responses to questions about petty corruption with grand corruption, frequency of acts with amounts stolen, and social consequences.

9 Subjective perceptions may not reflect specific objective realities.

governance measured by KKZ/KKM indicators by one standard deviation raises incomes about three-fold in the long run, and reduces infant mortality by two thirds.

Apart from the issues related to the measurement of governance/institutional quality discussed above, earlier studies aiming at empirically testing the governance/institutions–growth nexus has been plagued by the problem of "simultaneity". The simultaneity problem became evident in the lack of robustness in results in earlier studies, which were found to be sensitive to sample periods covered, estimation techniques employed, and specific combinations of variables being omitted or included. Aron (2000) concludes her survey by underscoring the simultaneous determination of growth, investment, and institutions and pointing out how studies "often deal inadequately with endogenous institutional measures". This effectively prevents one from distinguishing whether it is primarily better governance scores that caused growth to be high, or the other way around. This is not a trivial matter from the policy viewpoint.

This problem cannot be easily addressed, mainly because too few explicit governance data were available *prior* to the growth periods being investigated. A precedent-setting attempt to circumvent this problem was however made by Acemoglu, Johnson, and Robinson (2001 and 2002), who used a historical variable—the rates of mortality among (European) colonial settlers during colonial times—to explain growth performance. This "instrumental variable" turned out to be related closely to *current* assessments of governance, particularly the risk of expropriation, while on the other hand it cannot be disputed that they existed completely *prior* to the occurrence of growth itself. Hence, the condition of prior occurrence to establish the causality can be met. The significant influence of historical settler-mortality in predicting subsequent growth bolsters a narrative in which low mortality encouraged a denser European settlement and a greater involvement in the formation of early institutions that respected property rights.[10] These early institutions are posited to have persisted to the present and influenced contemporary economic growth, thus indirectly substantiating the governance–growth nexus.

Subsequently, Rodrik, Subramanian, and Trebbi (2004) show that the Acemoglu, Johnson, and Robinson results were robust even if variables purporting to capture geography and trade policy openness were included. Interestingly, Rodrik, Subramanian, and Trebbi used settler-mortality as an instrument to capture exogenous variations in the KKM composite index. But while the instrumentation of governance variables may seem to resolve the problem of simultaneity, it gives rise to a different problem, namely that of attribution of the impact of the instrumental variable(s), and hence the theoretical interpretation of the causality.

[10] Acemoglu, Johnson, and Robinson (2001 and 2002) test a model where simultaneously: (i) current per capita output growth is affected by current risk of expropriation and other factors; and (ii) current risk of expropriation depends on past settler-mortality and still other factors.

In the original Acemoglu, Johnson, and Robinson articles, "settler-mortality" was a proxy for the "risk of expropriation". The same instrumental variable, on the other hand, was used by Rodrik, Subramanian, and Trebbi to explain the "rule of law". Other authors have interpreted the same variable even more differently. Easterly and Levine (2003), for example, interpret settler-mortality as part of a *geographical* determinant of institutions, together with crops and germs, along the lines suggested by Diamond (1997). Glaeser et al. (2004), in questioning the causal role assigned to institutions, argue that the instrumental variable employed (namely, historical settler-mortality) is actually more closely associated with current measures of human capital than with governance/institutional variables. If the same instrumental variable can be used to "explain" variations in one current institutional or governance aspect, what is the guarantee that it cannot also explain *another* institutional aspect, or perhaps even a *non-institutional* variable heretofore excluded? The use of instrumental variables thus still fails to close the causality debate.

While the foregoing discussions focus on improvement in institutional quality leading to better development performance, an alternative view is that economic development promotes institutional development, and that this direction of causality may be more important than the one from institutional development to economic development. Paldam and Gundlach (2008) empirically test both directions of causality by focusing on democracy as the macro institution and corruption as the micro institution. They find that, on balance, the prediction of increases in the level of income leading to improvements in institutional quality fits the data better than the one of the opposite direction, although not without exceptions. On the basis of this finding, they caution against the unguarded expectation for institutional reforms to improve economic performance in formulating development policies.

E. Linking Governance/Institutions with Inequality

The literature on governance and institutions has mostly focused on their relationship with economic growth. More recently, however, there is growing interest in their link with income distribution and inequality. These interests have been dominated by two perspectives. One is how political institutions and democracy are linked with income distribution and inequality, and the other is how corruption is related to inequality. The consensus emerging from the literature appears to be that there is two-way causality in both cases. Political institutions and democracy influence how income and wealth are distributed in society. Income/wealth distribution and inequality also help shape political institutions and how democratic a society is likely to be. Similarly, corruption increases income inequality, while higher levels of income inequality also make corruption more likely.

1. Political Institutions and Inequality

For the first relationship, it has long been recognized that income distribution in an economy depends also on political factors. A hypothesis has been that a more egalitarian distribution of political rights in the form of a democracy should

be accompanied by a more equal income distribution. The existing evidence, however, does not find any robust relationship between democracy and inequality in cross-country regression exercises. For example, Bollen and Jackman (1985) fail to detect such a relationship; Li, Squire, and Zou (1998) find limited support for a negative relationship between democracy and inequality; and Gradstein, Milanovic, and Ying (2001) find that democracy has a negative but weak effect on inequality.

Gradstein, Milanovic, and Ying argue that a casual inspection of recent events in East Europe as well as in East Asia casts doubt on the idea that any simple relationship between democracy and inequality exists. Despite restrictive political rights in East European countries under communist regimes, income distribution was relatively egalitarian—which they attributed in part to the prevailing political ideology—while democratization of East European countries in the 1990s actually resulted in an increase in income inequality. Similarly, while some East Asian economies such as the Republic of Korea; Singapore; and Taipei,China have been among the economies with the most egalitarian income distribution in the world, their political record was historically far from democratic. Thus, Gradstein, Milanovic, and Ying argue for a consideration of additional factors—such as ideology—when examining income distribution and its relationship to democracy. Their analysis of panel data for 126 countries reveals that ideological factors are important determinants of income inequality. Greater democratization in Judeo-Christian societies is likely to result in a substantial reduction in inequality, but not so much in others (Buddhist/Hindu, Confucian, and Communist). The authors also find that democracy is more likely to reduce inequality in countries with a parliamentary than a presidential system.

Rogowski and MacRae (2004) argue that institutions co-vary with political and economic inequality. Supported by historical case studies from ancient Greece to recent times, they find that changes in economic and military technology, trade, and factor endowments influence the evolution of political institutions toward being more or less democratic. However, where these exogenous changes increase social and economic inequality, countries are likely to adopt less representative political institutions or to do away with democratic institutions altogether. On the other hand, decreasing inequality creates incentives to broaden political participation.

The view that inequality influences institutions is echoed by other authors. Boix (2001) argues that one of the key conditions for a stable democracy is relative equality across individuals in economic and social conditions. His model takes off from the well-known correlation between development and democracy—that democracy prevails when income differences decline and political resources across the population are balanced. Perotti (1996) and Bénabou (1996) argue that inequality could lead to politically unstable institutions as power swings back and forth between redistributive populist factions and oligarchy-protecting conservative factions. It has been argued that

initial conditions such as income distribution play a key role in the rise of democratic institutions. With high initial inequality, the ruling elite can suppress democracy and equal rights before the law so as to preserve their privileged position (e.g., Bourguignon and Verdier 2000) or has the power to capture larger rent, thus enriching itself further at the expense of the poor and perpetuating high inequality and slower growth (Gradstein 2007). Acemoglu (2008) develops a model in which the oligarchy blocks democracy to preserve its privileges.

Chong and Gradstein (2007) argue that there is strong empirical support for the mutually reinforcing mechanism between inequality and institutions, but the direction of causality from inequality to institutions is stronger than the reverse causality. They argue that inequality causes weak institutions because the rich and powerful obstruct changes in the institutions to protect their ability to capture rents. Also, weak judicial systems which do not give adequate protection to the poor constrain the ability of the poor to extract rents. They also find that low measures of institutional quality are associated with persistently high or worsening inequality, which leads to persistently poor institutional outcomes.

2. Corruption and Inequality

One of the earlier contributions to the corruption-inequality literature is Johnston (1989), claiming that corruption tends to preserve or widen existing income inequalities. Li, Xu, and Zou (2000) find that the relationship between corruption and income inequality exhibits an “inverted-U” shape—high or low corruption levels correspond to low income inequality, while an intermediate level of corruption is associated with high income inequality. They assert that corruption affects inequality through capital market imperfection, government spending, and asset distribution. The World Bank (2000), on the other hand, finds that lower levels of corruption are statistically associated with lower levels of inequality and that corruption hurts the poor through a number of channels, including lower economic growth, more regressive taxes, lower and less effective social spending, disincentives to investment in the human capital of the poor, and unequal distribution of assets. Gyimah-Brempong (2002) adds that the choice of development strategy, through highly subsidized capital and exacerbated by high levels of corruption in most African countries, influences income inequality.

Gupta, Davoodi, and Alonso-Terme (2002) identify a number of mechanisms by which corruption could increase inequality. For example, corruption can lead to tax evasion, defective tax administration, and exemptions that favor the wealthy (and well-connected). This can erode the effective tax base and undermine possibilities for compulsory income/wealth redistribution from rich to poor, thus perpetuating or even increasing inequality. Corruption can also prevent effective targeting of social programs to the truly needy when funds from poverty alleviation programs are siphoned off from poor to powerful/rich individuals. Corruption can hurt human capital formation by lowering tax revenues. Reduced funding for education lowers the ability of the poor to invest in human

capital; because the rich can invest in human capital from nonpublic sources or lobby the government to redirect social spending toward higher education and tertiary health, economic inequality worsens (Mauro 1998; Tanzi and Davoodi 1997; Gupta, Davoodi, and Alonso-Terme 2002). Finally, when corruption changes the rules of the game in favor of the rich and well-connected, it increases uncertainty and risk for the poor and not so well-connected, which discourages investment in their human and/or physical capital, perpetuating inequality (Gupta, Davoodi, and Alonso-Terme 2002).

Begovic (2005), however, argues that these mechanisms are not very convincing, and thus cast doubt on the theoretical explanation of the link between corruption and inequality. For instance, decreasing the effective tax burden can have beneficial effects on growth, not necessarily decreasing inequality, but increasing the poor's prospects of improving their welfare. He also disputes the claim that tax exemptions and evasion only favor the rich and well-connected. On the extent to which corruption-induced poor targeting of social programs really contributes to increasing inequality, Begovic finds it unrealistic to assume that the rich will deliberately undermine social programs by siphoning off rather limited funds, when engaging in other forms of corruption may generate much higher returns. Poor targeting of social programs results in inefficient lowering of inequality, rather than an increase in inequality.

In a comparative study of 129 countries, You and Khagram (2005, 136) argue "that inequality fosters a norm of corruption as acceptable behaviour, that corruption is likely to reinforce or widen existing inequalities, and that vicious circles of inequality-corruption-inequality are thus likely to manifest." They also find that the effect of inequality on corruption is likely to be greater in more democratic countries. Uslaner (2008) argues that the roots of corruption lie in economic and legal inequality, and economic inequality provides a fertile breeding ground for corruption, and, in turn, leads to further inequalities—an inequality trap.

F. Linking Inequality with Growth via Institutions

The understanding on the role of governance and institutions in economic development can be enhanced by an appreciation of the relationship between inequality and growth. This relationship has been extensively studied, beginning with work spawned by Simon Kuznets's (1955) well-known "inverted-U" hypothesis that economic growth first causes increasing, then decreasing, inequality. It is now generally accepted, however, that this broad characterization of the growth-inequality pattern is not empirically borne out.

A second line of thinking hypothesizes how inequality affects growth. The literature of the 1950s and 1960s was typified by the Kaldorian hypothesis that an unequal income distribution may promote growth based on the higher savings propensities of the rich versus those of the poor (Kaldor 1956). Recent literature, however, has emphasized

different mechanisms. Easterly (2007) highlights three. The *first* focuses on human capital: where the distribution of incomes and opportunities is unequal, growth cannot be high because human capital will be denied to the vast majority. The *second* focuses on political economy: in a highly inequitable society, the majority who are poor may favor redistributive policies; whether ultimately successful or not, a social preoccupation with pressures for redistribution will divert social attention and energy away from policies that would otherwise have promoted growth.

The *third* mechanism through which inequality affects growth focuses on institutions. Discussions in the previous section have highlighted the possible two-way causality between political institutions and inequality and that between inequality and corruption. Inequality could also affect growth through its negative impact on "trust", "cooperative norms", and "social cohesion", as these informal institutional mechanisms help reduce transaction costs, promote cooperation, and play a substitutive role when formal institutional arrangements are weak and ineffective (Putnam 1993; Woolcock 1998; Fukuyama 2000; Easterly, Woolcock, and Ritzen 2006). Easterly, Woolcock, and Ritzen (2006) provide empirical evidence that social cohesion, proxied by inequality, endogenously determines institutional quality, which in turn causally determines growth.

III. Governance/Institutions vis-à-vis Growth and Inequality: Where Asia Stands

This section first looks at where Asia and its various subregions stand in the governance and institutional quality ranking vis-à-vis other regions of the world. Despite caveats highlighted earlier, this study uses the WGIs that measure six dimensions including voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption. Governance "surplus" or "deficit" in each of these dimensions for each developing Asian economy is then estimated by comparing its score in a particular indicator with a corresponding international reference line (see Kaufmann 2003, Quibria 2006). Finally, this section looks at whether or not developing Asian economies with governance in surplus in a particular dimension grow faster and have lower income inequality than economies with governance in deficit in the same dimension.

A. Governance Scores

Table 1 reports average governance scores calculated from the WGIs for various regions in the world and subregions of Asia in 2008. Each composite indicator for each economy is constructed to yield a value centered at zero and ranges from –2.5 to 2.5, with larger positive values being superior. In calculating regional averages, the economy's populations were used as weights.

Table 1: Worldwide Governance Indicators by Region/Subregion, 2008

Region/Sub region	2008 Governance Indicators					
	Voice and Accountability	Political Stability	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
Asia	–0.72	–0.78	–0.05	–0.35	–0.27	–0.43
Central and West Asia	–1.12	–1.93	–0.69	–0.74	–0.94	–0.87
East Asia	–1.64	–0.27	0.24	–0.26	–0.30	–0.31
Pacific	0.11	–0.37	–0.75	–0.54	–0.74	–0.57
South Asia	0.29	–1.09	–0.13	–0.41	0.00	–0.36
Southeast Asia	–0.66	–0.83	–0.25	–0.24	–0.53	–0.72
Eastern Europe	0.46	0.20	0.03	0.05	–0.03	–0.35
Former Soviet Union	–0.77	–0.43	–0.43	–0.65	–0.84	–0.89
Latin America and Caribbean	0.17	–0.41	–0.15	0.25	–0.51	–0.17
Middle East and North Africa	–1.21	–0.77	–0.39	–0.63	–0.31	–0.28
OECD	0.95	0.49	1.25	1.10	1.14	1.21
Sub-Saharan Africa	–0.63	–1.05	–0.75	–0.70	–0.83	–0.80

OECD = Organisation for Economic Co-operation and Development.
Note: East Asia excludes Japan, which is lumped with the OECD countries.
Source: Means of each region/subregion are computed from the Worldwide Governance Indicators (http://info.worldbank.org/governance/wgi/index.asp) and weighted by population based on the World Development Indicators Online database.

In 2008, Asia scored lower than the OECD grouping and Eastern Europe in all six dimensions, and lower than Latin America and the Caribbean in all except government effectiveness and rule of law, but higher than sub-Saharan Africa in all except voice and accountability; higher than the former Soviet Union in all except political stability, and higher than the Middle East and North Africa in all except control of corruption and political stability (where Asia is marginally lower). Across the six dimensions of governance, Asia scored relatively high in government effectiveness and rule of law (ranking the third highest after the OECD and Eastern Europe); but relatively low in political stability (ranking the second lowest, before sub-Saharan Africa), and in voice and accountability (ranking the third lowest, before the Middle East and North Africa and the former Soviet Union). Asia's ranking in regulatory quality and control of corruption lies in between.

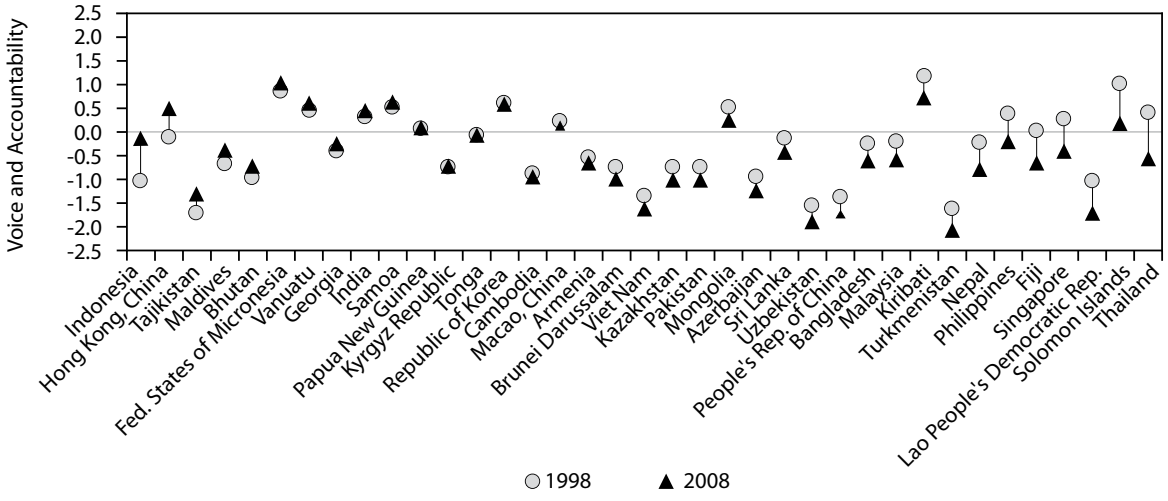
Table 1 shows a great deal of heterogeneity within Asia. Among the five subregions: (i) East Asia ranks the first in political stability, government effectiveness, and control of corruption, second in regulatory quality and rule of law, but last in voice and accountability; (ii) South Asia ranks first in voice and accountability and rule of law, second in government effectiveness and control of corruption, third in regulatory quality, and second last in political stability; (iii) Southeast Asia ranks first in regulatory quality, third in voice and accountability, political stability, government effectiveness, and rule of law, and second last in control of corruption; (iv) the Pacific ranks second in voice and accountability and political stability, third in control of corruption, second last in regulatory

quality and rule of law, and last in government effectiveness; and (v) Central and West Asia ranks second last in voice and accountability and government effectiveness, and last in the other four dimensions.

Figure 1 compares governance scores of developing Asian countries in 2008 with those in 1998 to show how these changed during the last decade. The picture is quite mixed. Among the developing Asian economies for which data are available, the score in voice and accountability improved in 10 economies and slipped in 25; in political stability it improved in 16 and slipped in 16; in government effectiveness it improved in 16 and slipped in 18; in regulatory quality it improved in 16 and slipped in 19; in rule of law it improved in 18 and slipped in 15; and in control of corruption it improved in 18 and slipped in 15. The figure shows that, during 1998–2008, the number of economies registering improvement was greater than those registering slippage in the rule of law and control of corruption. In the other four dimensions, the number of countries registering slippage is greater than those registering improvement. In each of the six dimensions, there are a few economies registering no change in the period.

Figure 1: Trends in Developing Asia Governance Indicators, 1998 and 2008 (ordered by magnitude of improvement)

(a)



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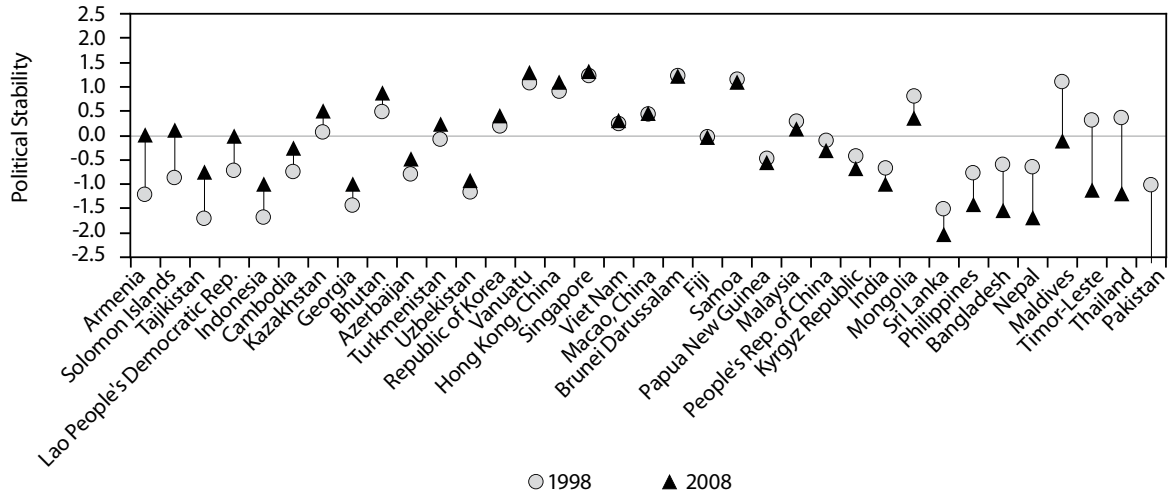
(b)



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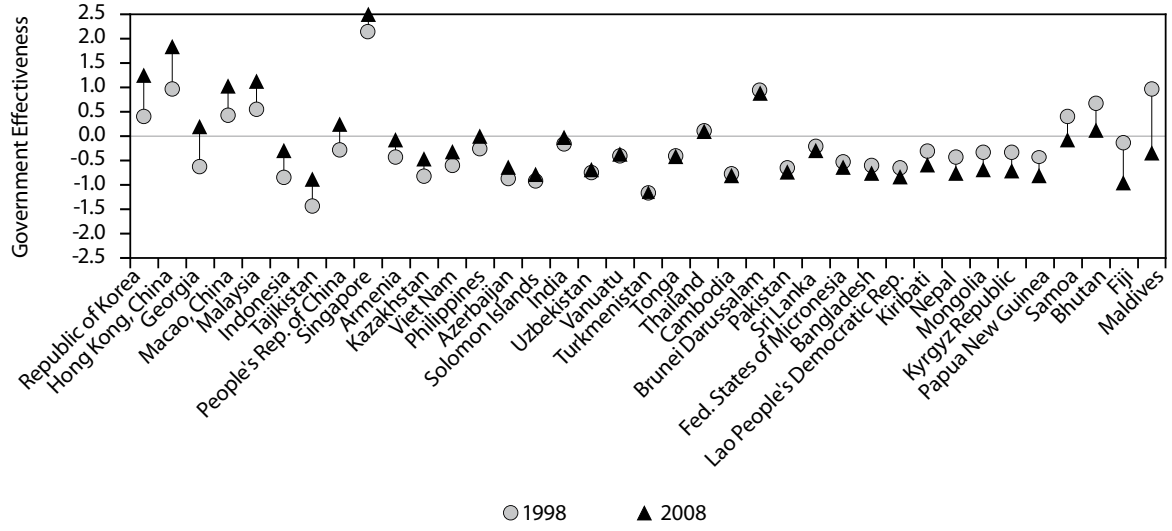

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Figure 1: *continued.*

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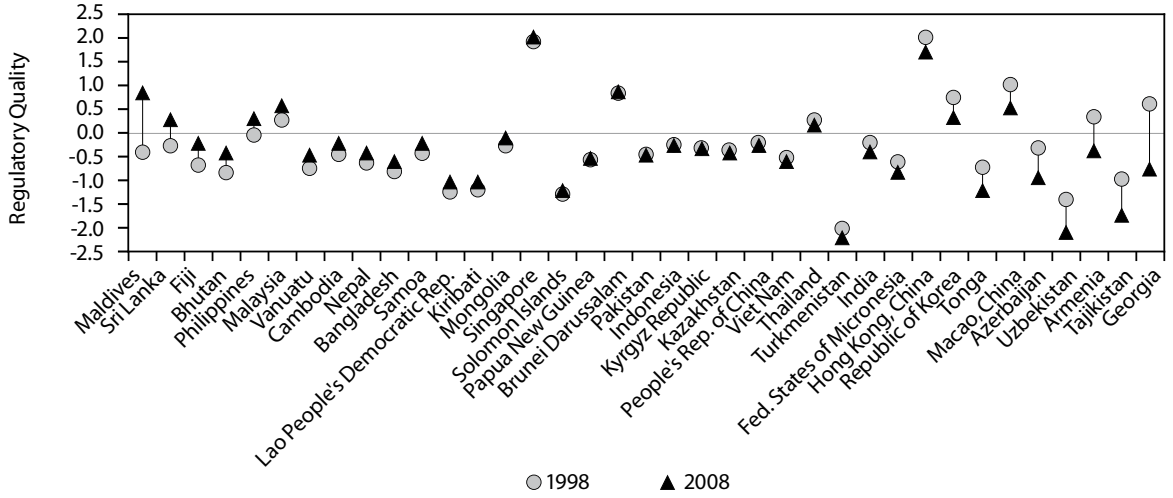
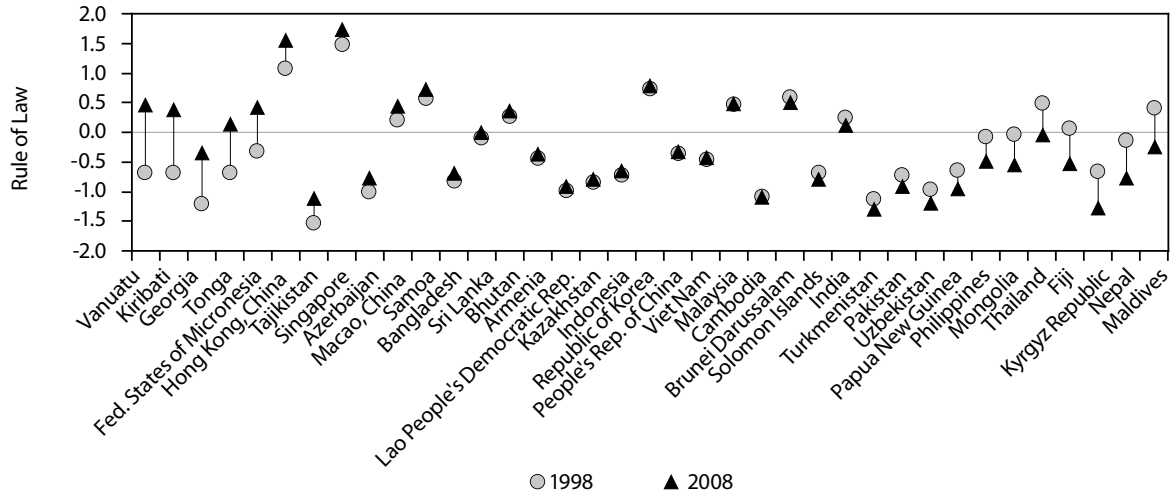


(e)



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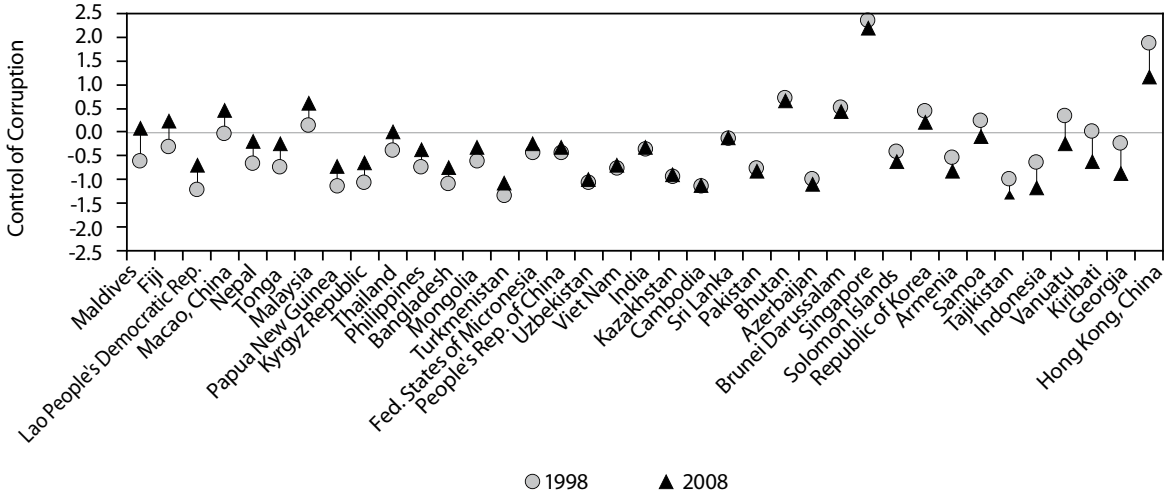


Source: Worldwide Governance Indicators (http://info.worldbank.org/governance/wgi/index.asp).

B. Governance Surplus and Deficit

To validate the governance/institution–growth nexus in the context of Asia, Quibria (2006) estimates the governance surplus or deficit for each developing Asian economy. He does this by comparing an aggregated governance measure (calculated from the six governance indicators of the 2002 WGIs) with an international reference measure that is estimated from a regression line—referred to in this paper as international reference line—generated by regressing the 2002 WGIs' aggregate governance measure against per capita real income using a cross-section of 151 countries. The international reference line indicates the expected level of governance/institutional quality corresponding to each level of income. Therefore, if the actual score of a particular economy lies above the international reference line, the economy is considered as having governance surplus; if it lies below the international reference line, the economy is considered as having a governance deficit.

Quibria argues that if the governance-to-growth relationship exists and is dominant, one should expect the economies with governance surplus to show higher growth than those with deficit. However, he finds that during 1999–2003, economies with governance surplus in fact experienced much lower growth than those with governance deficit. A simple regression of growth performance of 29 developing Asian economies against the aggregate governance measure, after controlling for per capita real GDP, yields a significant coefficient but with the wrong sign.[11] Quibria raises a number of possible reasons for this paradoxical result. One hypothesis is that it may not be the aggregate score on governance, but some

[11] The equation used is GDP growth = a + b (ln GDP per capita) + c (governance) + error.

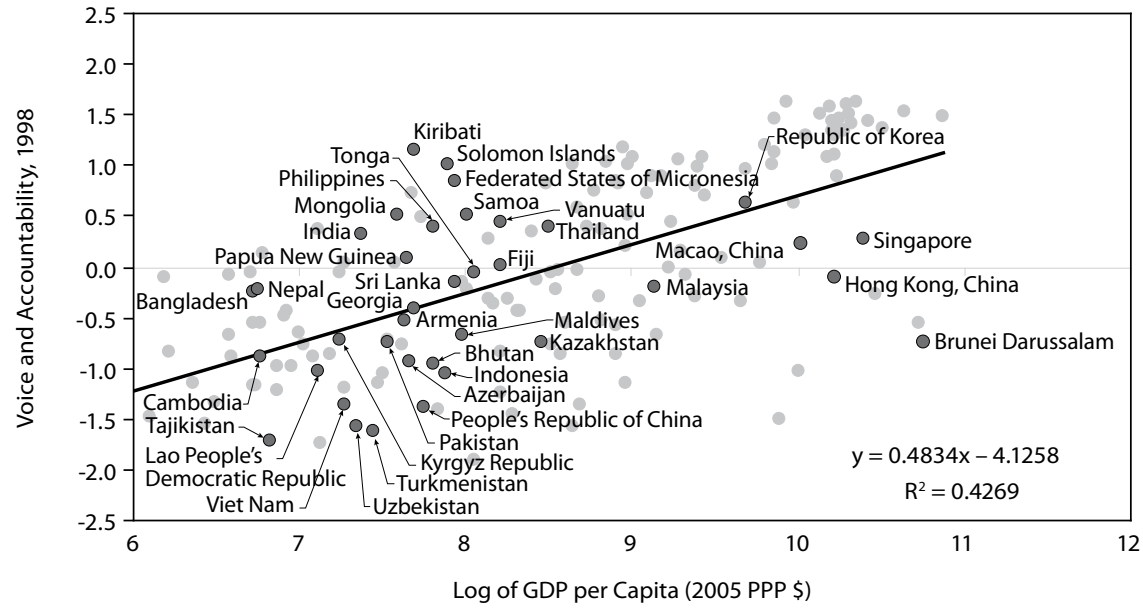
of the individual scores that are important for economic growth. This possibility is appealing, particularly in light of the caveat (notably from KKZ/KKM themselves) that these indicators, properly speaking, should not be aggregated into a single measure.

To test this hypothesis, this study first estimates governance surplus or deficit in each of the six dimensions of the WGIs for each developing Asian economy in both 1998 and 2008, following Quibria's approach. The study then investigates how these measures of surplus or deficit are related to the growth performance of these economies during 1998–2008. In particular, the focus is on the relationship between measures of governance surplus or deficit in 1998 and the subsequent growth performance, to avoid the simultaneity problem discussed earlier. The 1998 data set covers 164–169 economies, including 33–37 developing Asian economies, depending on data availability; while the 2008 data set covers 166–168 economies, with 36–37 developing Asian economies. Per capita real GDP was measured in purchasing power parity (PPP) terms at constant 2005 international dollars. Six international reference lines are estimated, each corresponding to one of the six governance dimensions.

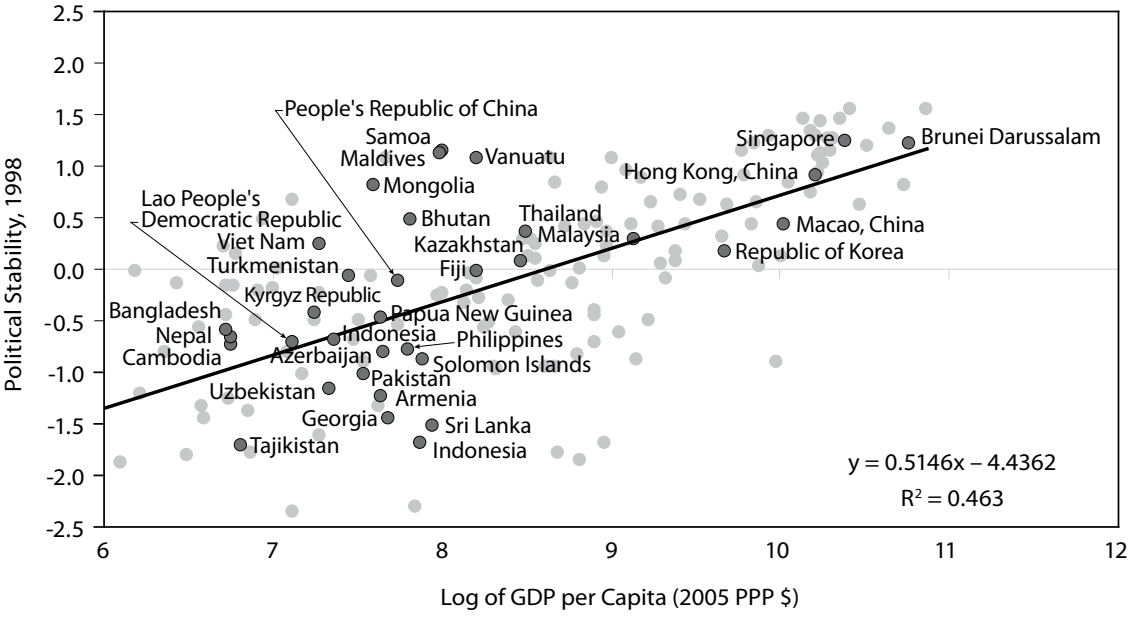
Figures 2 and 3 show a positive relationship between the governance score and per capita real GDP for all six dimensions in 1998 and 2008. In 1998, for example, judging from the slope of the fitted regression lines and estimated R-squared coefficients, government effectiveness has the highest correlation with per capita real GDP, with a coefficient of 0.6145 and R-squared of 0.6494; followed by rule of law, regulatory quality, control of corruption, political stability, and voice and accountability, which is least correlated with a coefficient of 0.4834 and R-squared of 0.4269. In 2008, the correlation between governance indicators and per capita real income remained more or less the same. Government effectiveness remained the most highly correlated; political stability, and voice and accountability remained the least correlated with the income level. The relatively low correlation between voice and accountability and political stability, on one hand, and per capita real income, on the other, can also be seen from the wider scatters of the sample observations in Figures 2(a), 2(b), 3(a), and 3(b) than those in the other figures.

Figure 2: Governance Scores and per Capita Real Income, 1998

(a)



(b)



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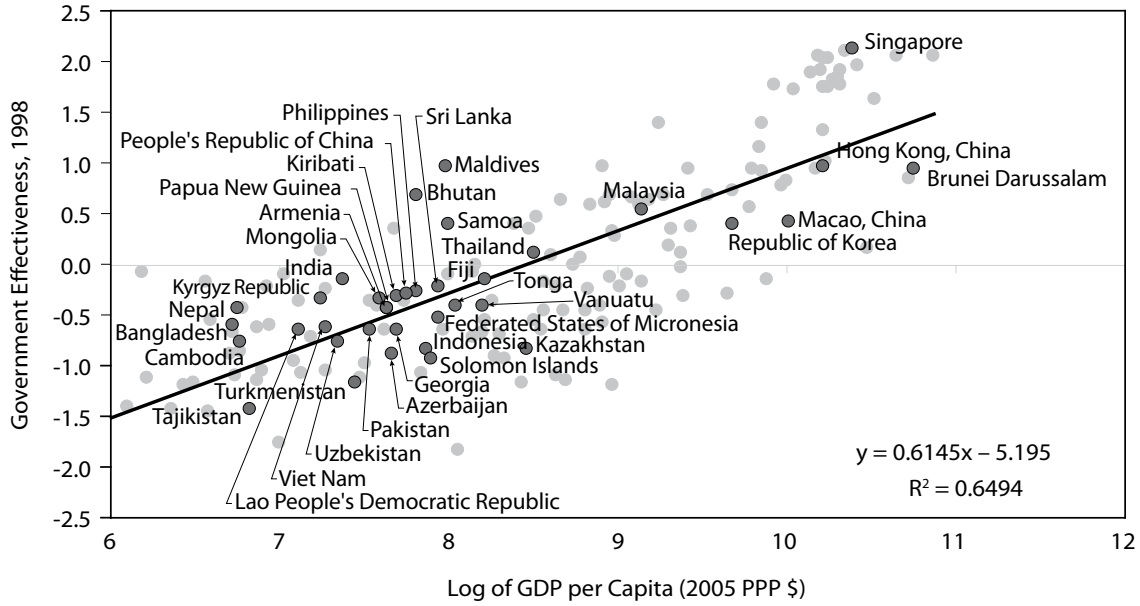

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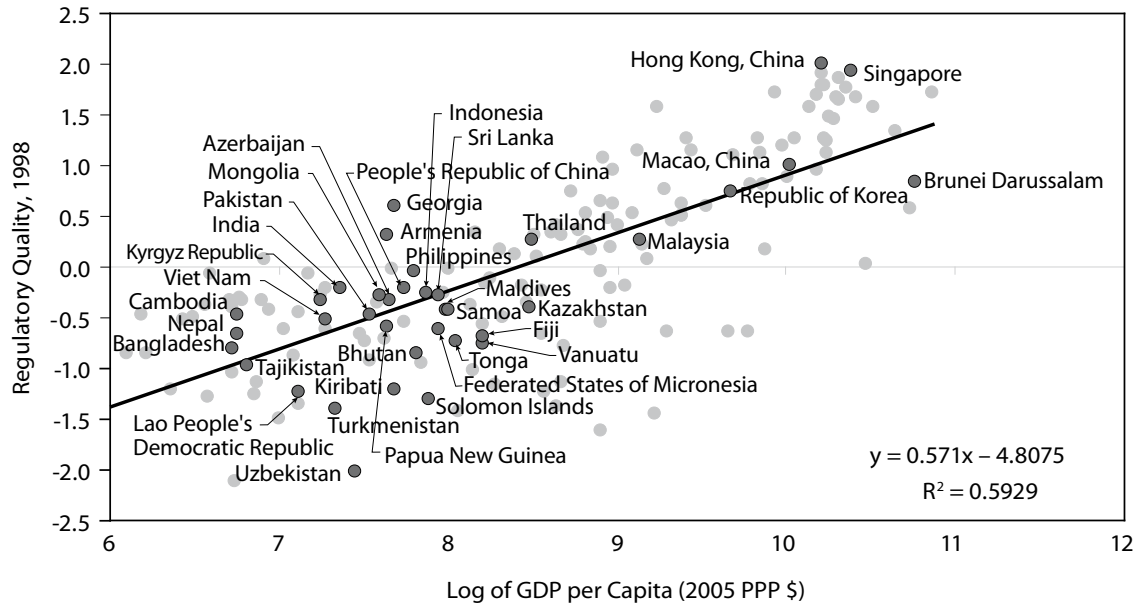

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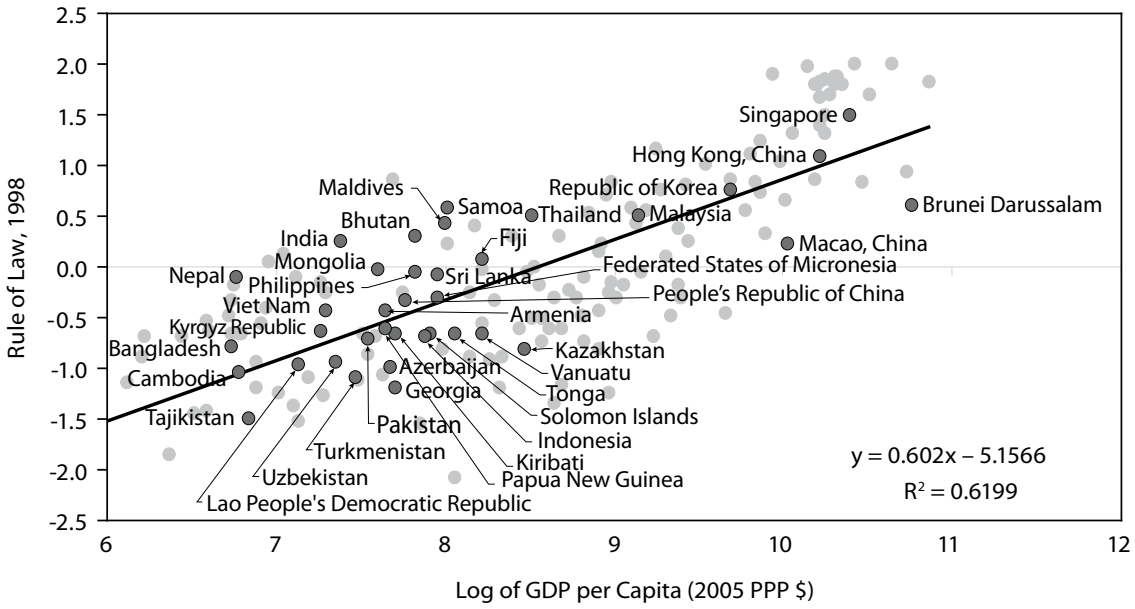
(e)



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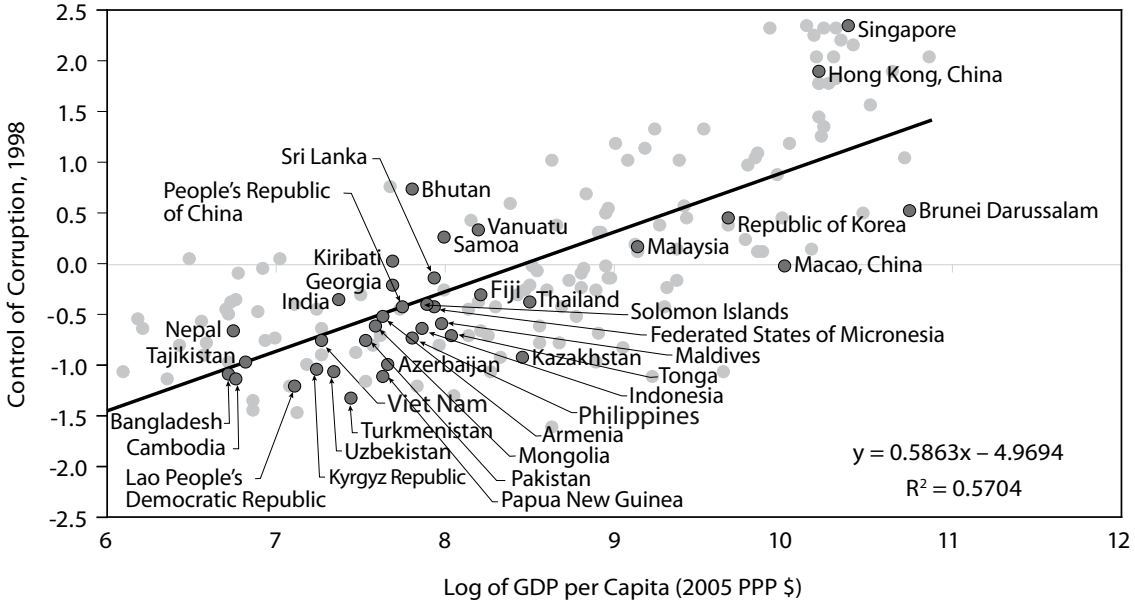
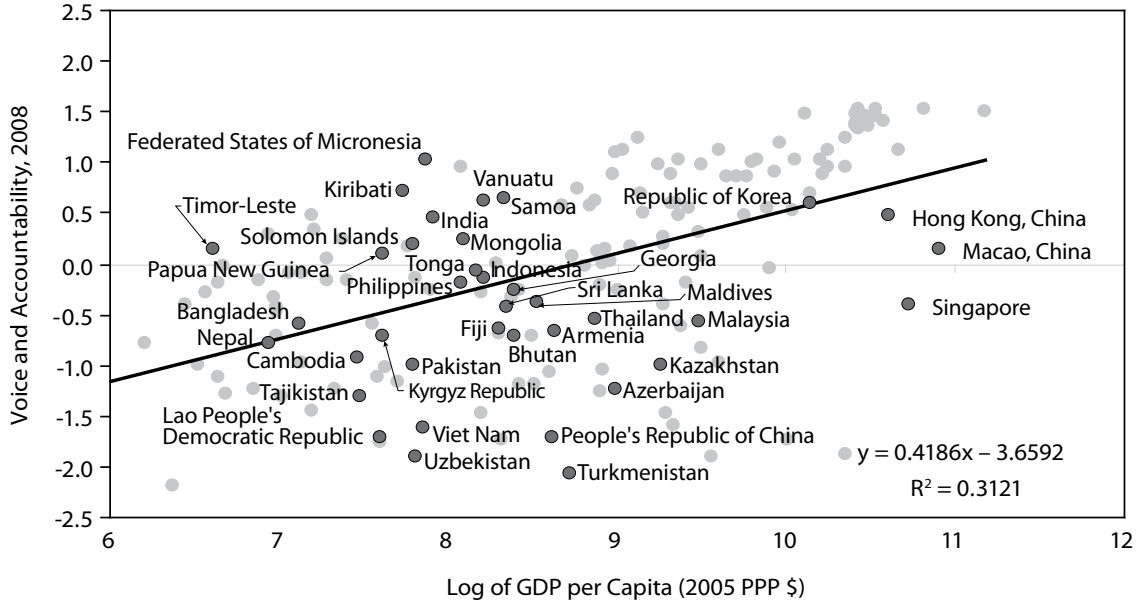


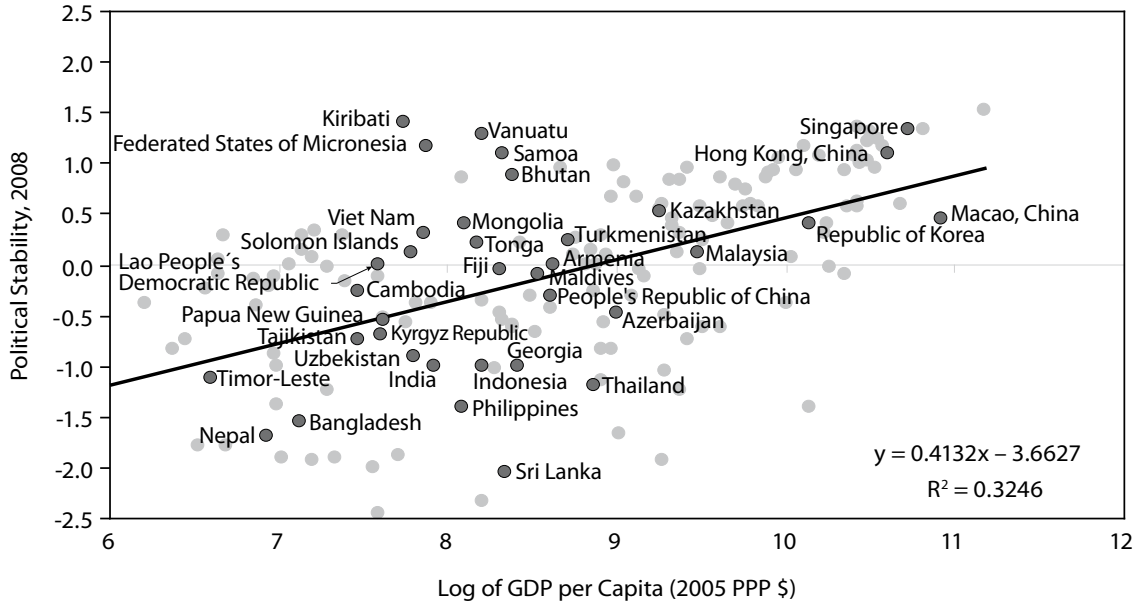
GDP = gross domestic product, PPP = purchasing power parity.
Source: Authors' estimates based on data from the World Bank's Worldwide Governance Indicators and World Development Indicators Online.

Figure 3: Governance and per Capita Real Income, 2008

(a)



(b)



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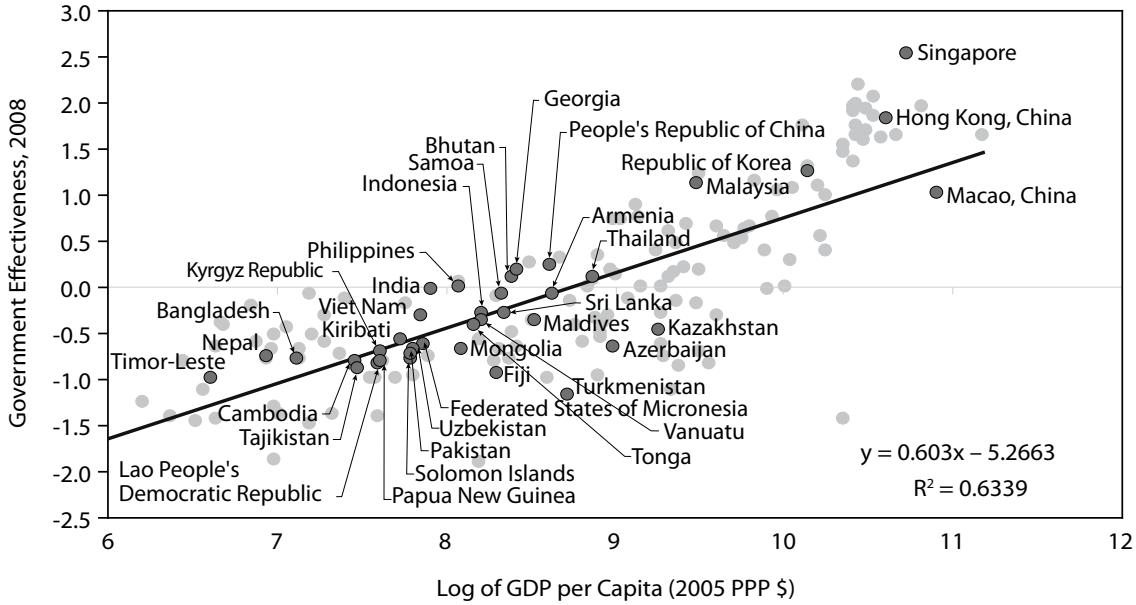

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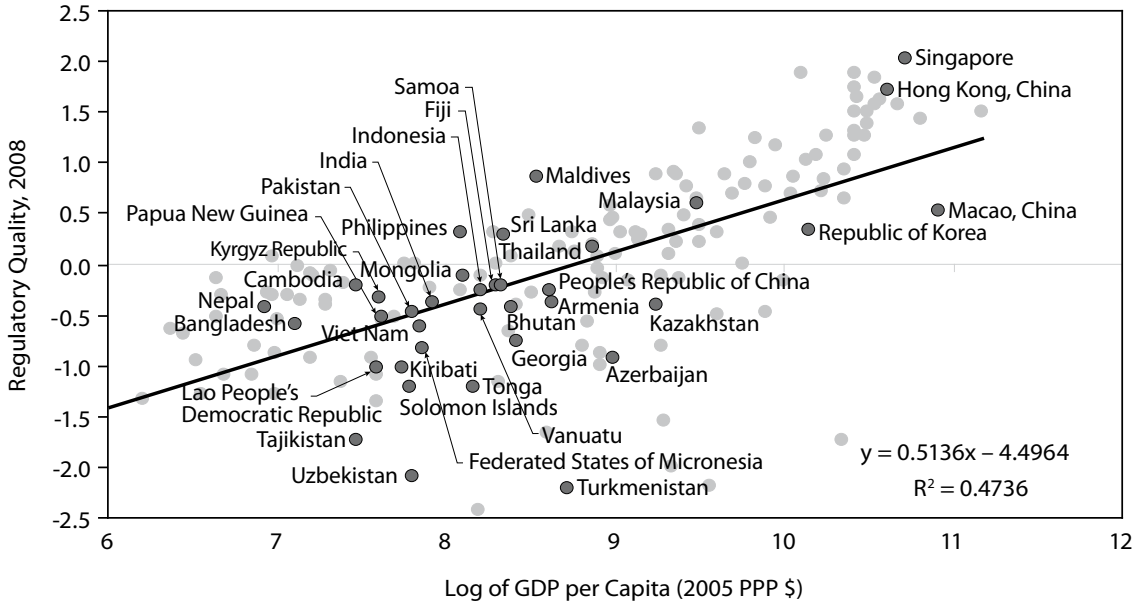

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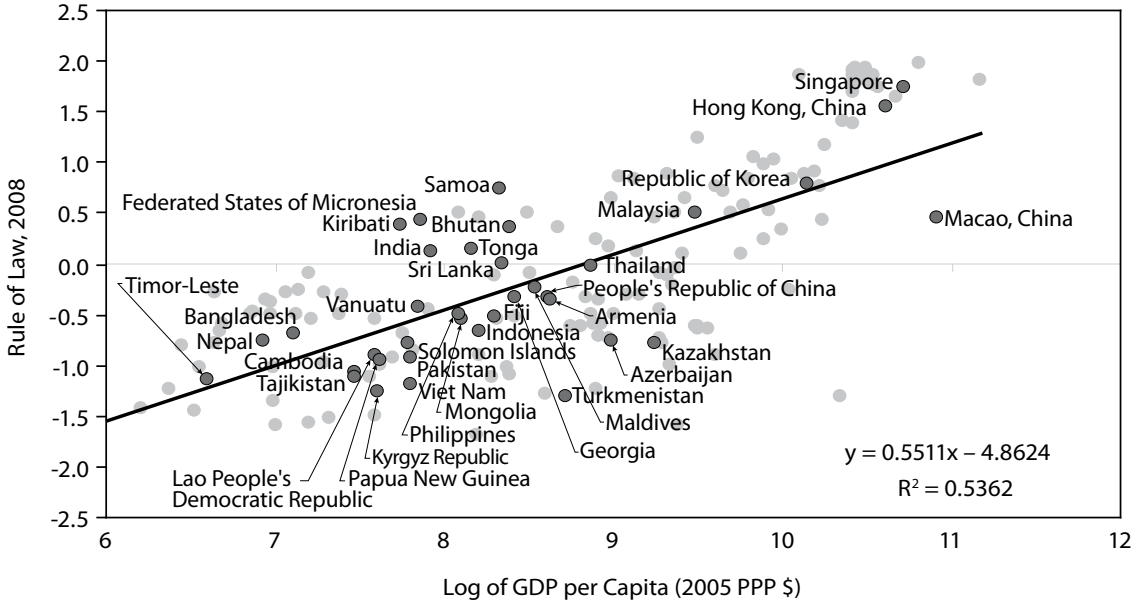
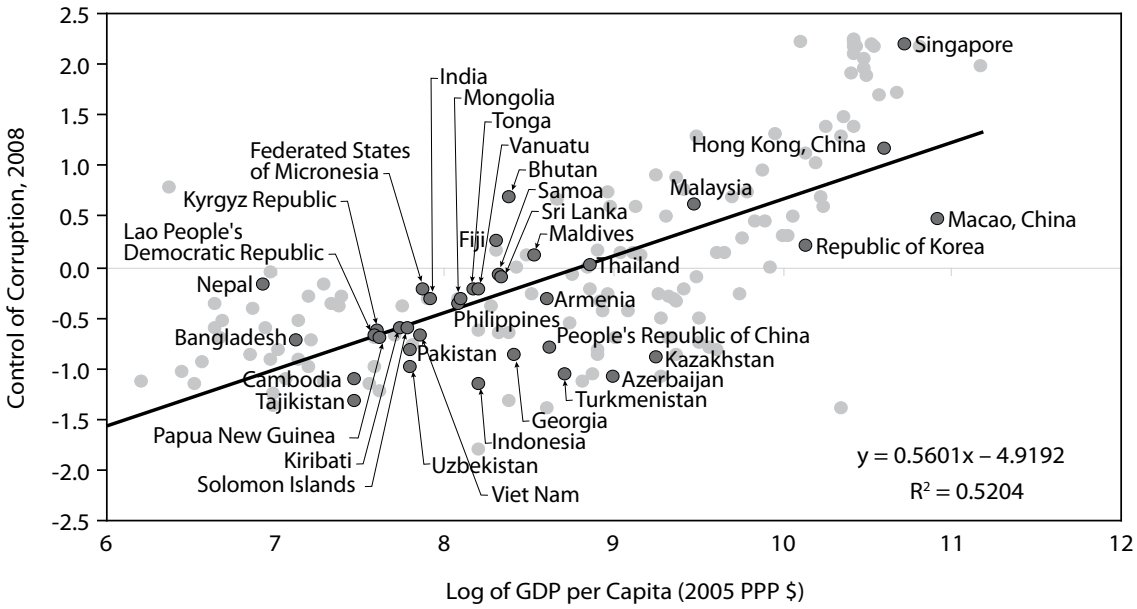


(f)



GDP = gross domestic product, PPP = purchasing power parity.
Source: Authors' estimates based on data from the World Bank's Worldwide Governance Indicators and World Development Indicators Online.

Before turning to an examination of how governance surplus or deficit measures relate to growth performance in developing Asia, it is useful to look at how these changed during the last decade.[12] Figure 4 compares the percentage of economies with governance in surplus in each of the six dimensions for developing Asia as a whole in 1998 with 2008. During 1998–2008, among 36–38 developing Asian economies, the percentage of countries with surplus declined from 42% to 35% in voice and accountability; from 60% to 49% in political stability; from 53% to 46% in government effectiveness; from 55% to 43% in rule of law; remained unchanged in regulatory quality; but increased from 26% to 47% in control of corruption. In fact, all five subregions saw the proportion of economies with surplus in control of corruption increasing during 1998–2008. More detailed results for the five subregions are as follows:

(i) In Central and West Asia, none of the economies had a surplus in voice and accountability in both 1998 and 2008. During 1998–2008, the proportion of countries with surplus decreased in government effectiveness, regulatory quality (from 50% to 22%), and rule of law (from 20% to 0%), but increased slightly in political stability and control of corruption.

(ii) In East Asia, the proportion of economies with surplus decreased in all dimensions except government effectiveness and control of corruption, with the decline particularly significant in regulatory quality, from 83% to 40%.

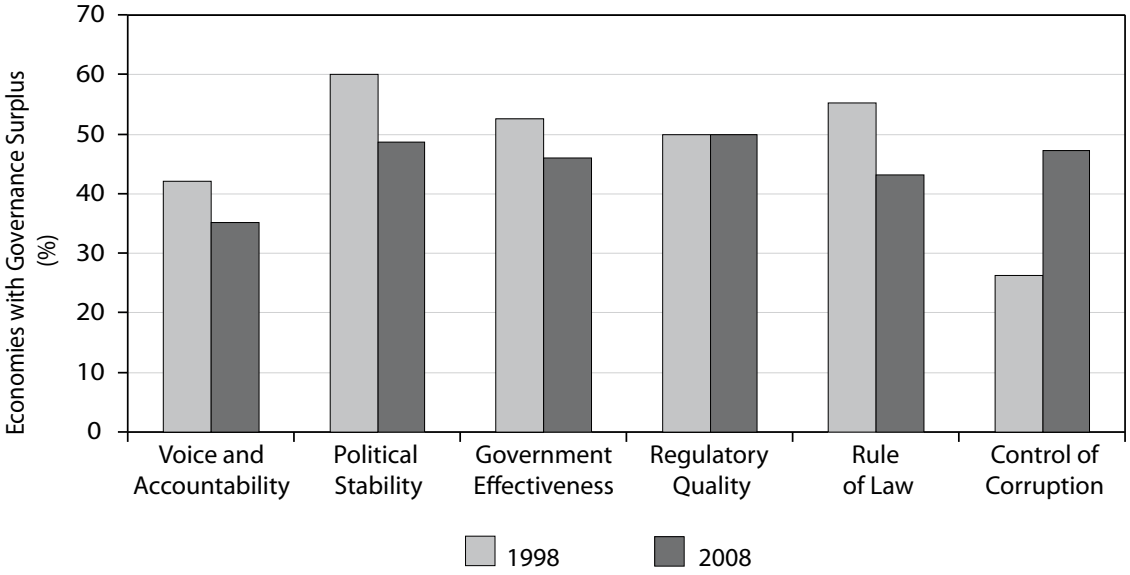
(iii) In the Pacific, the proportion of economies with surplus remained more or less unchanged in voice and accountability (89%) and government effectiveness (33%), and increased in the other three dimensions.

(iv) In South Asia, the proportion of economies with surplus increased significantly in regulatory quality (from 43% to 83%) and control of corruption (from 57% to 100%), but decreased in the other four dimensions.

(v) In Southeast Asia, the proportion of economies with surplus increased in voice and accountability, government effectiveness, regulatory quality, and control of corruption (from 10% to 38%), but decreased in political stability (from 70% to 50%) and rule of law (from 60% to 38%).

[12] It should be noted that a change in the surplus or deficit for a particular economy can be due to a change in the economy's governance score or a shift in the international reference line.

Figure 4: Percentage of Developing Asian Economies with Governance Surplus, 1998 and 2008



Source: Authors' estimates based on data from the World Bank's Worldwide Governance Indicators and World Development Indicators Online.

C. Linking Governance/Institutions with Growth and Inequality

Do developing Asian economies with governance in surplus grow faster and have lower income inequality than those with governance in deficit? This section looks at the empirical evidence. First, all developing Asian economies (where data are available) are classified into two groups, one with governance in surplus and the other in deficit on the basis of 1998 data. The respective average annual growth rates of per capita real GDP of the two groups during 1998–2008 are then calculated. For the income inequality measure, the Gini coefficients reported in the 2009 Human Development Report (UNDP 2009) are used. This enables avoiding the simultaneity problem.

1. Governance/Institutions and Growth Performance

Figure 5 shows that, in the case of voice and accountability, there were 16 economies with governance in surplus and 20 economies in deficit in 1998. For the economies in surplus, the average annual growth rate of per capita real income during 1998–2008 was 2.3%,[13] with India growing at the highest rate of 5.6% and Solomon Islands at the lowest, a negative rate of 1.1%. For the 20 economies in deficit in voice and accountability, the average annual growth rate of per capita real income was 6.7%,

[13] Following Quibria (2006), the simple arithmetic average is calculated rather than weighted by the size of population to avoid the results being dominated by a few big economies.

almost 3 times as high as the economies in surplus, with Azerbaijan growing at the highest rate of 14.3% and Pakistan at the lowest rate of 2.7%. These results appear to suggest that voice and accountability is not a critical driver of growth performance for this particular sample of countries during this particular period.

Among the economies with deficit in voice and accountability, Azerbaijan, Turkmenistan, and Kazakhstan are oil/gas-rich countries. During 1998–2008, the world oil price increased from $11.8 to $95.6 per barrel.[14] This exogenous factor has certainly contributed to these economies' GDP growth, but may be argued to have nothing to do with their governance or institutional quality. To get rid of the impact of this exogenous factor, the average annual growth rate for the economies in deficit in voice and accountability was recalculated by excluding the three oil/gas-rich economies, as well as Macao, China since its growth relied largely on the gambling and associated tourism industry. The average annual per capita GDP growth rate of the economies in deficit in voice and accountability after the four are excluded was 5.6%, which is still more than twice as high as the economies in surplus in this dimension.[15]

This paradoxical result also applies to political stability. Twenty developing Asian economies in 1998 had surplus and 13 had deficit in this indicator. For the economies in surplus, the average annual growth rate of per capita real income was 4.7%, with the fastest growing being Turkmenistan at 13.5% and slowest growing being Papua New Guinea at –0.2%. In the case of deficit economies, the average annual growth rate was 5.8%, 1.1 percentage points higher than that for surplus economies, with Azerbaijan growing at the highest rate of 14.3% and Solomon Islands at the lowest rate of –1.1%. After excluding the three oil/gas-rich economies and Macao, China, the average annual growth rate for the surplus economies was 4.0% and that for the deficit ones was still 0.7 percentage point higher, at 4.7%.

In the case of government effectiveness, regulatory quality, and rule of law, on the other hand, better *initial* governance/institutional quality does lead to better growth performance *subsequently*. Twenty developing Asian economies had surplus in government effectiveness and 16 had deficit in 1998. The average annual growth rate for economies in surplus was 4.5% (none of the three oil/gas-rich economies or Macao, China was in surplus). For the deficit economies, the average annual growth rate was 5.0% including oil/gas-rich ones and Macao, China, but only 2.9% excluding them. These results show that economies with better government effectiveness grew faster than those with weak government capacity by 1.6 percentage points annually during 1998–2008, if oil/gas-rich economies and Macao, China are not considered. In the case of regulatory quality, the average annual growth rate for the 19 economies in surplus was 5.8% and that for the 16

[14] Average weekly spot price (free on board) for all countries weighted by estimated export volume, taken from the Energy Information Administration website (http://www.eia.doe.gov/).

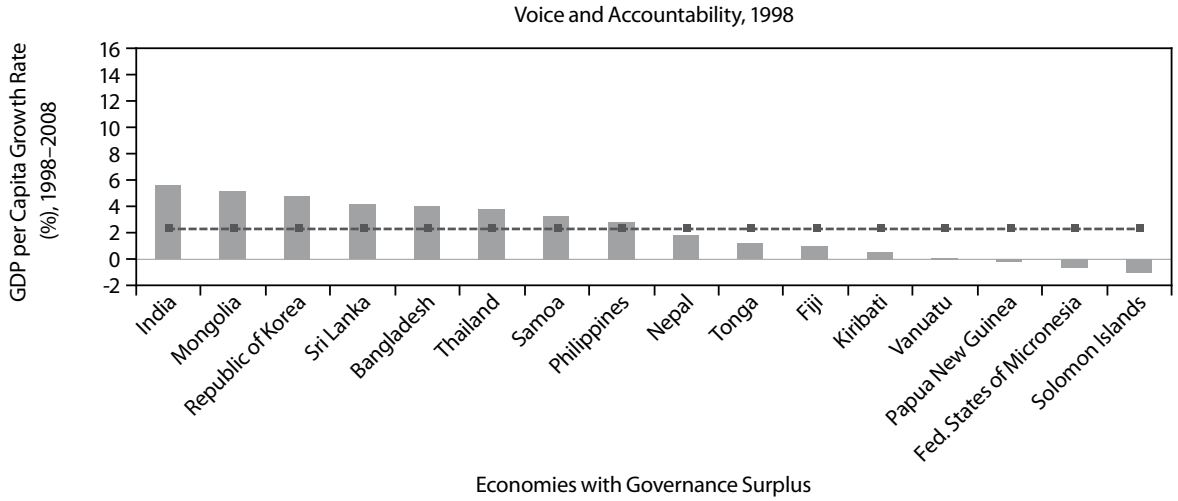
[15] Regressing the annual average per capita GDP growth rate between 1998 and 2008 against the score of voice and accountability in 1998 yields a negative, statistically significant coefficient, with or without controlling for per capita GDP in 1998.

economies in deficit was 4.0%, if oil/gas-rich economies and Macao, China are included; when these economies are excluded, the corresponding figures are 5.0% and 3.0%, respectively. Similarly, in the case of rule of law, the average annual growth rate for the 21 economies in surplus was 4.5% (none of the three oil/gas-rich economies or Macao, China was in surplus) and that for the 15 in deficit was 5.4%, with oil/gas-rich ones and Macao, China included; excluding these economies, the average annual growth rate for those in deficit was 3.3%.[16]

Finally, in the case of control of corruption, 10 economies had surplus and 28 had deficit in 1998. The average growth rate during 1998–2008 for the surplus economies was 3.9%, with the fastest growing being Georgia at 7.6% and slowest growing being Vanuatu at 0.4%. For the deficit economies, the average annual growth rate was 5.4% when including oil/gas-rich ones and Macao, China, but 4.0% when these economies are excluded. Thus, the two groups had more or less the same level of growth performance.[17]

Figure 5: Governance Surplus/Deficit and Income Growth Rate

(a1)



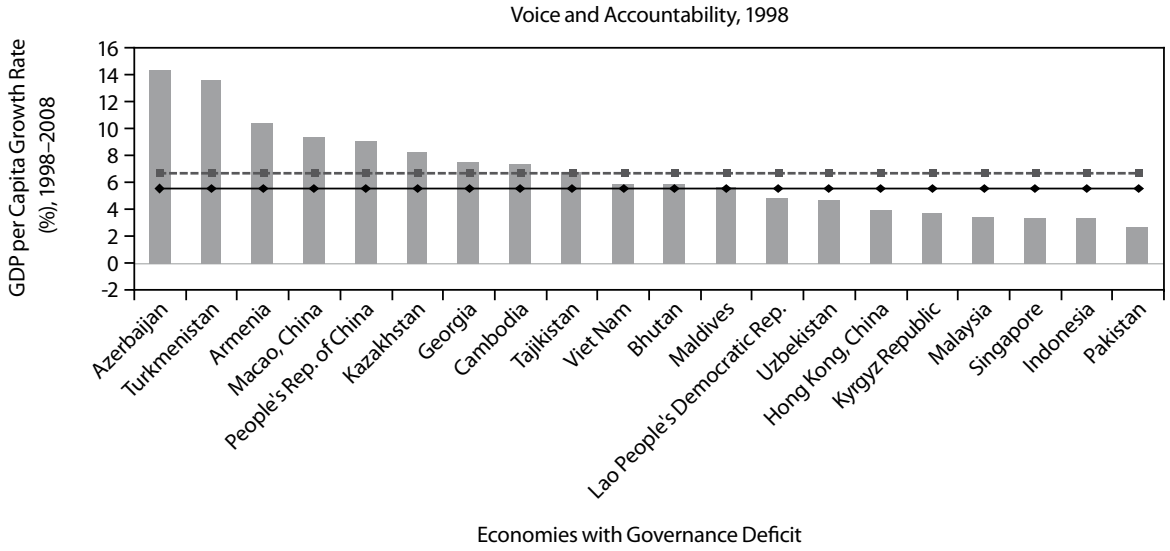
continued.

[16] Regressing the annual average per capita GDP growth rate between 1998 and 2008 against the score of government effectiveness, regulatory quality, or rule of law in 1998 yields a positive, statistically insignificant coefficient, with or without controlling for per capita GDP in 1998.

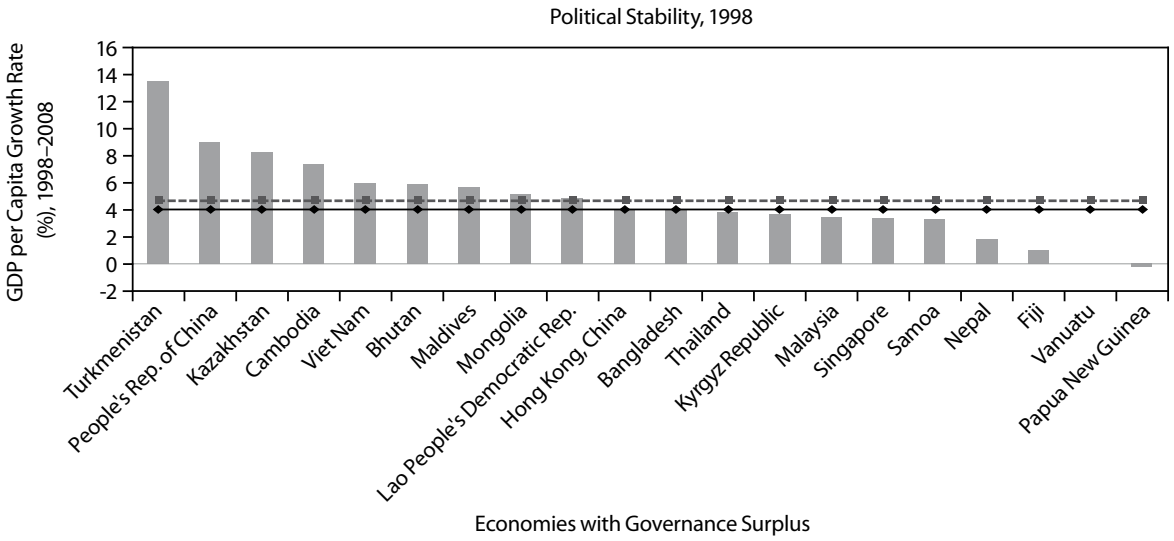
[17] Regressing the annual average per capita GDP growth rate between 1998 and 2008 against the score of control of corruption in 1998 yields a negative, statistically insignificant coefficient, with or without controlling for per capita GDP in 1998.

Figure 5: *continued.*

(a2)



(b1)



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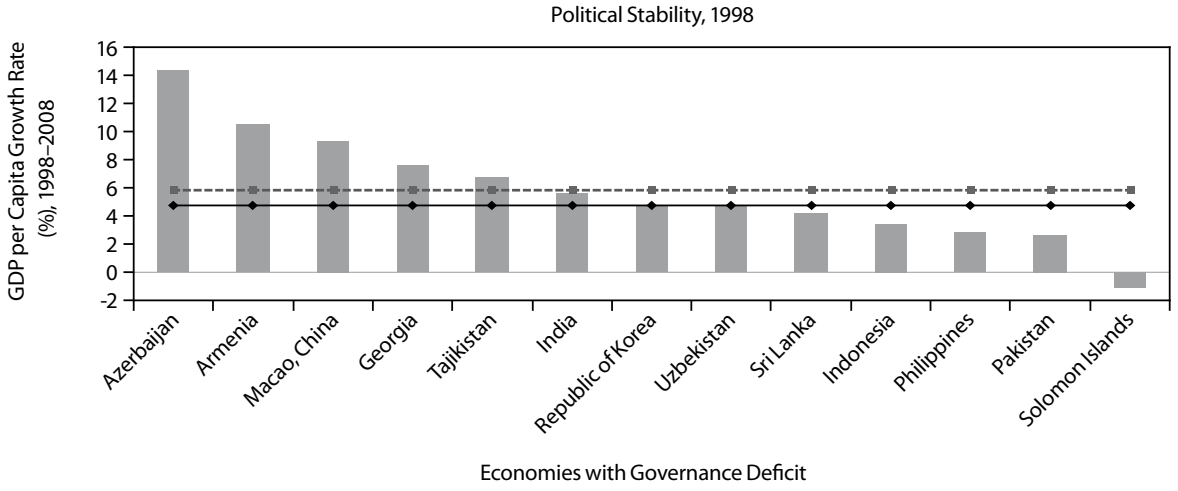
(b2)



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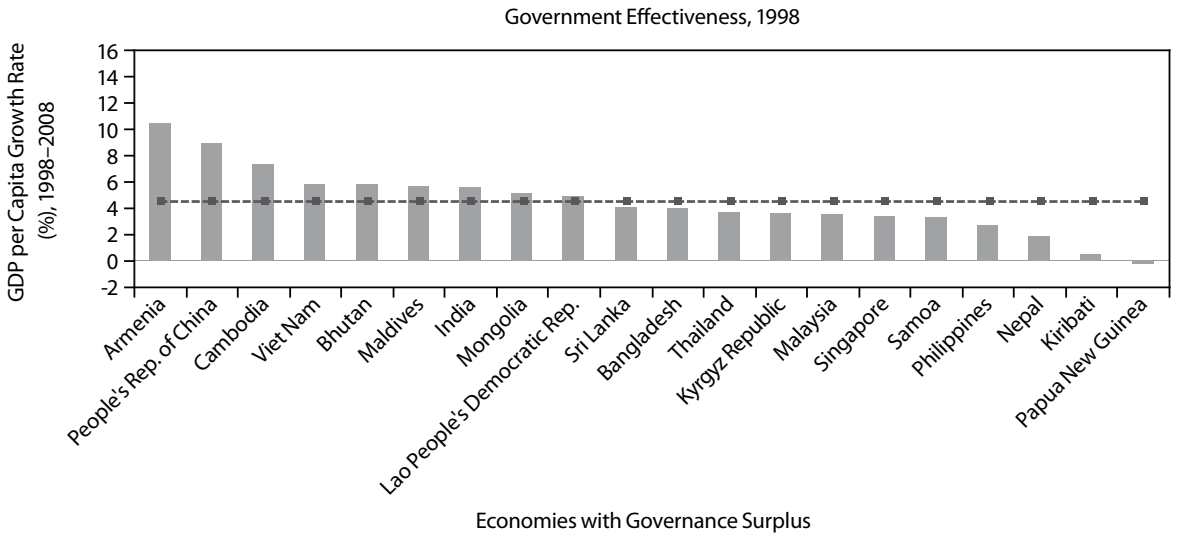

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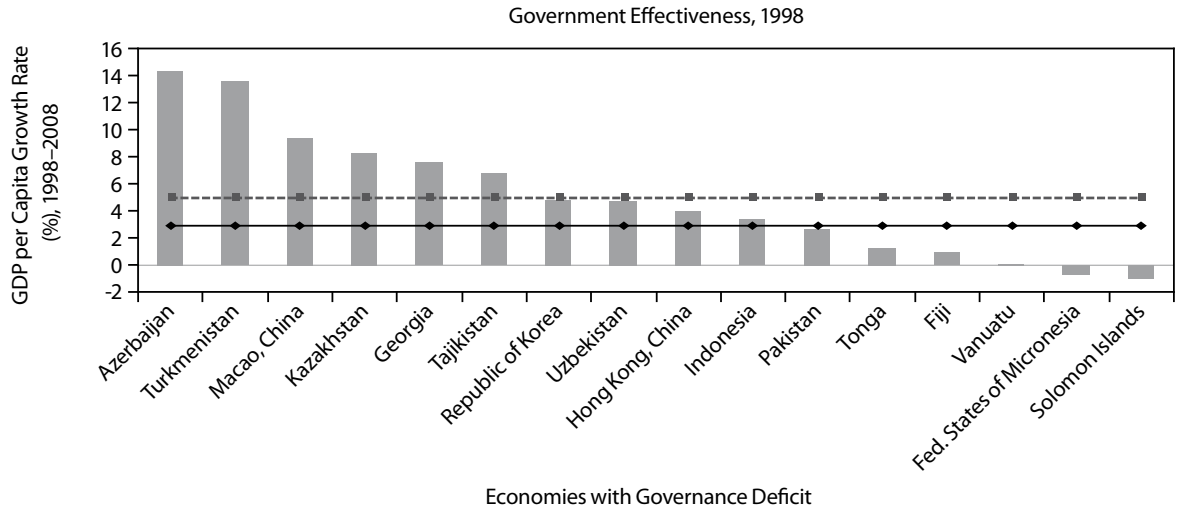
(c2)



(d1)

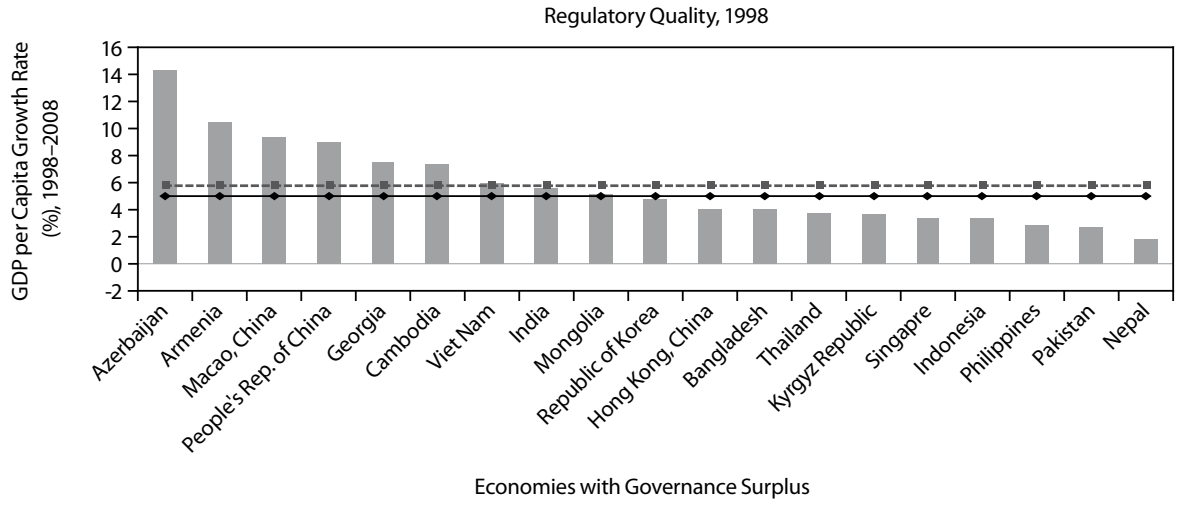


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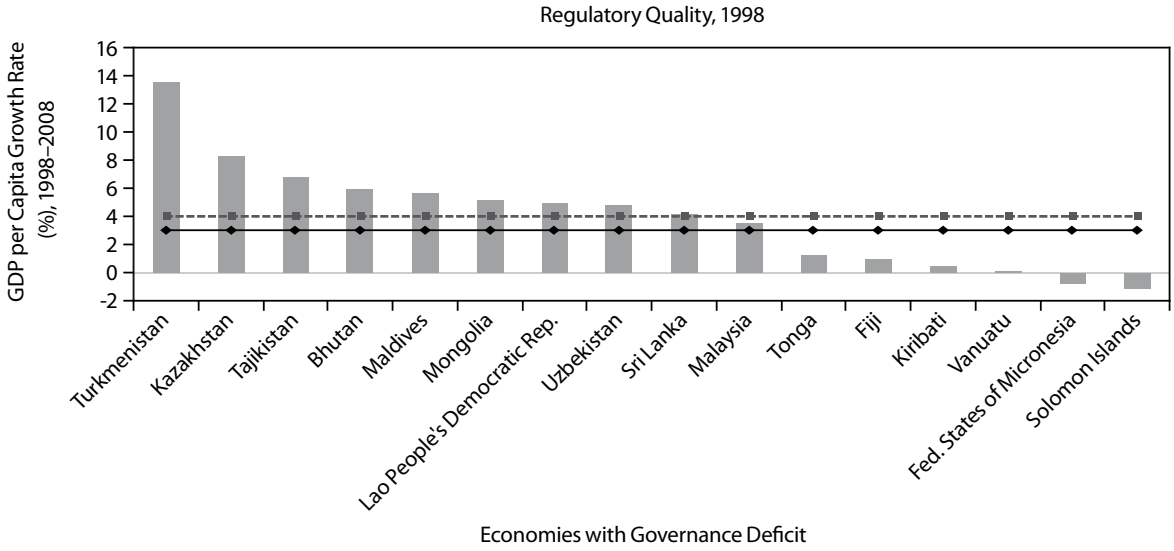
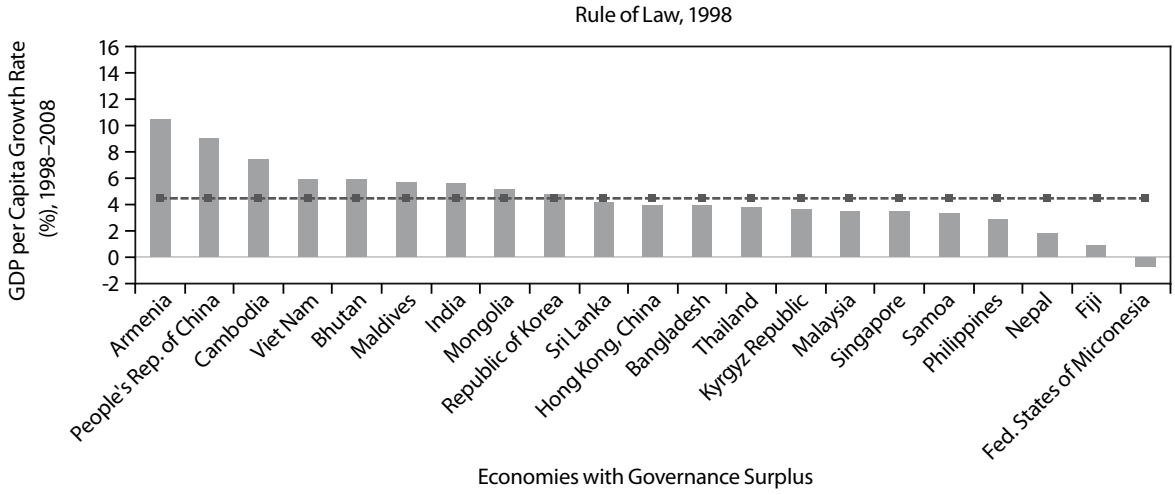
Figure 5: *continued.*

(d2)



(e1)



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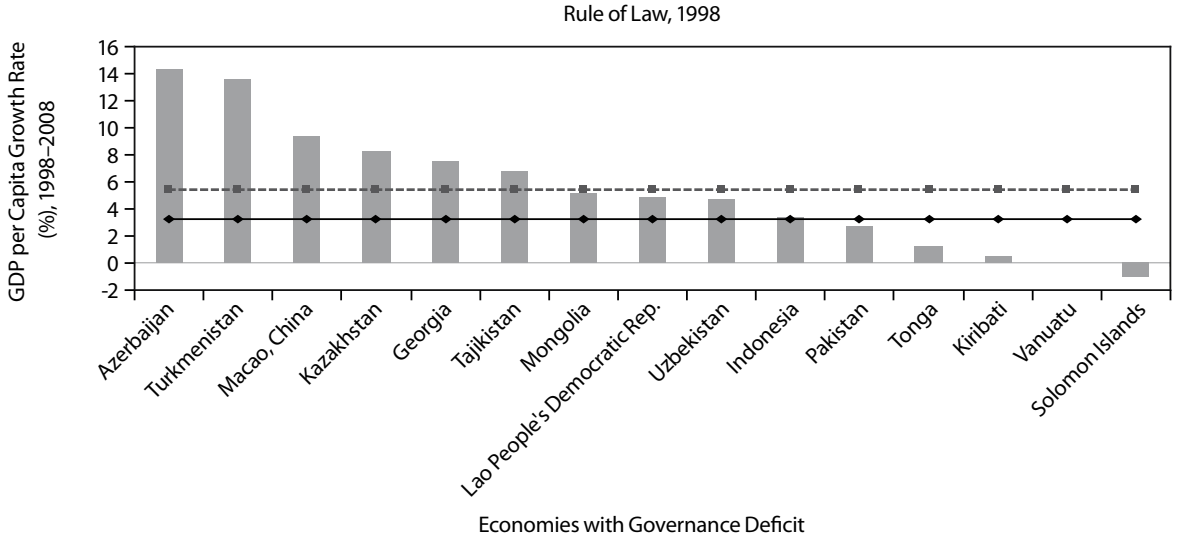
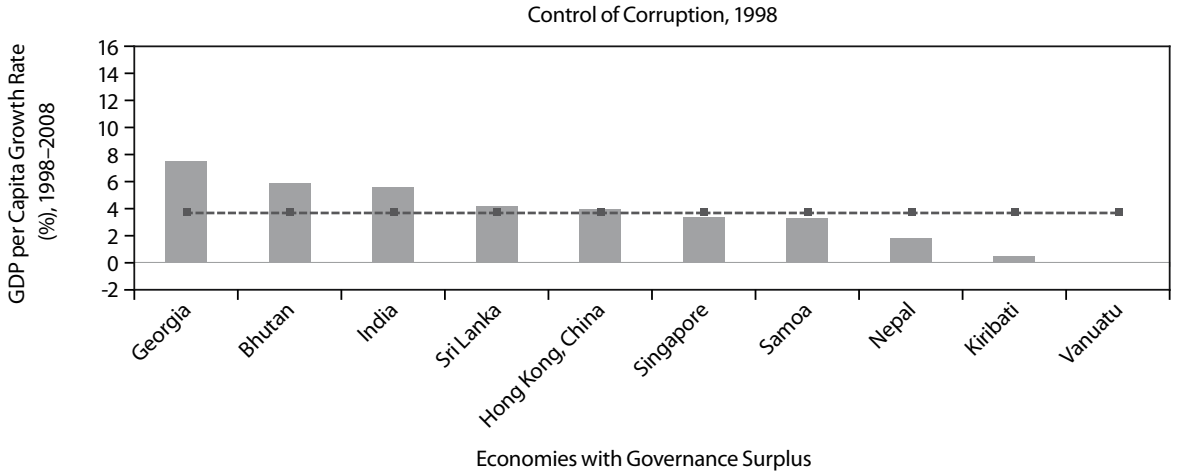
(e2)



(f1)



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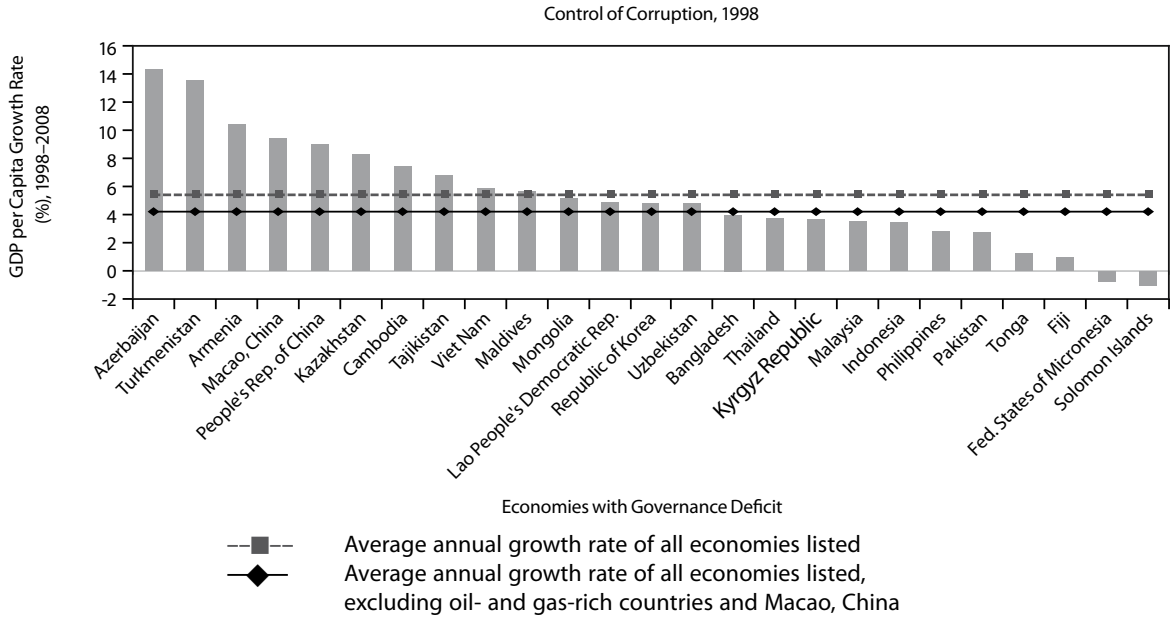
(f2)



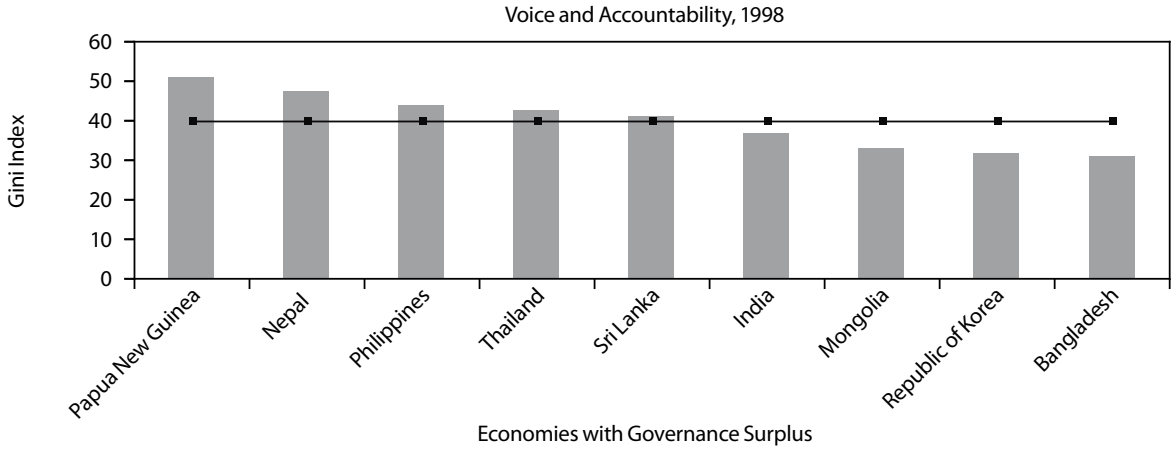
GDP = gross domestic product.
Source: Authors' estimates based on data from the Worldwide Governance Indicators and UNDP (2009).

2. Governance/Institutions and Income Inequality

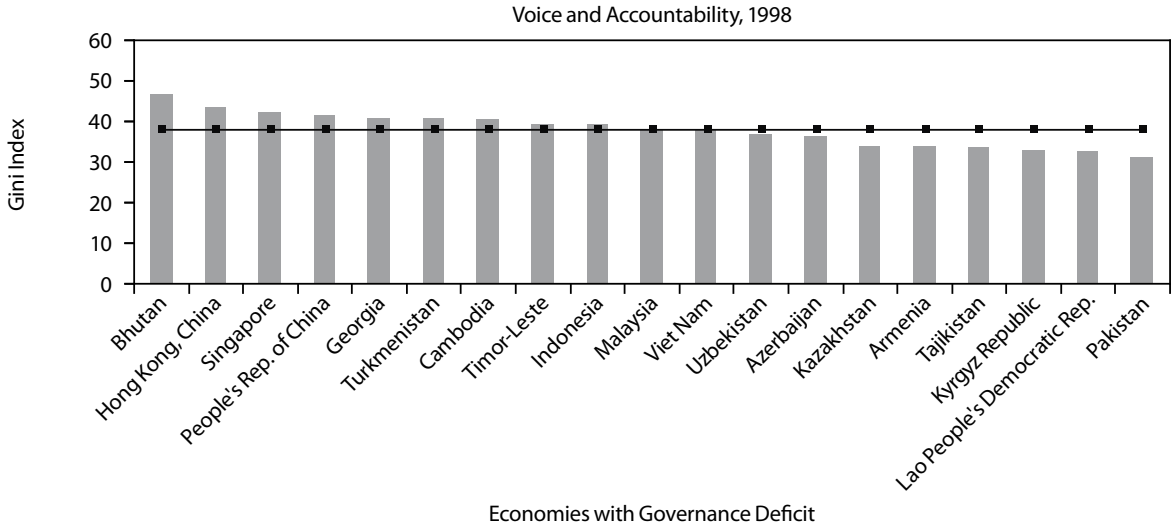
Figure 6 shows Gini indexes of developing Asian economies grouped by whether each of them is in surplus or deficit in each of the six dimensions of the WGIs. The picture here is not as clear-cut as in the case of linking governance quality with growth performance. In the case of voice and accountability, the average value of the Gini indexes is 0.4 for economies in surplus and 0.38 for those in deficit, with no significant difference. This also applies to political stability (0.4 and 0.37 for economies in surplus and deficit, respectively), government effectiveness (0.4 and 0.37), regulatory quality (0.38 and 0.4), and rule of law (0.4 and 0.38). The only governance indicator making a relatively significant difference to the Gini index is control of corruption, but with the direction counterintuitive to what is predicted by theory: the average value of the Gini indexes of the economies with control of corruption in surplus is 0.43 while that of the economies in deficit is 0.37.

Figure 6: Governance surplus/deficit and Gini index

(a1)



(a2)



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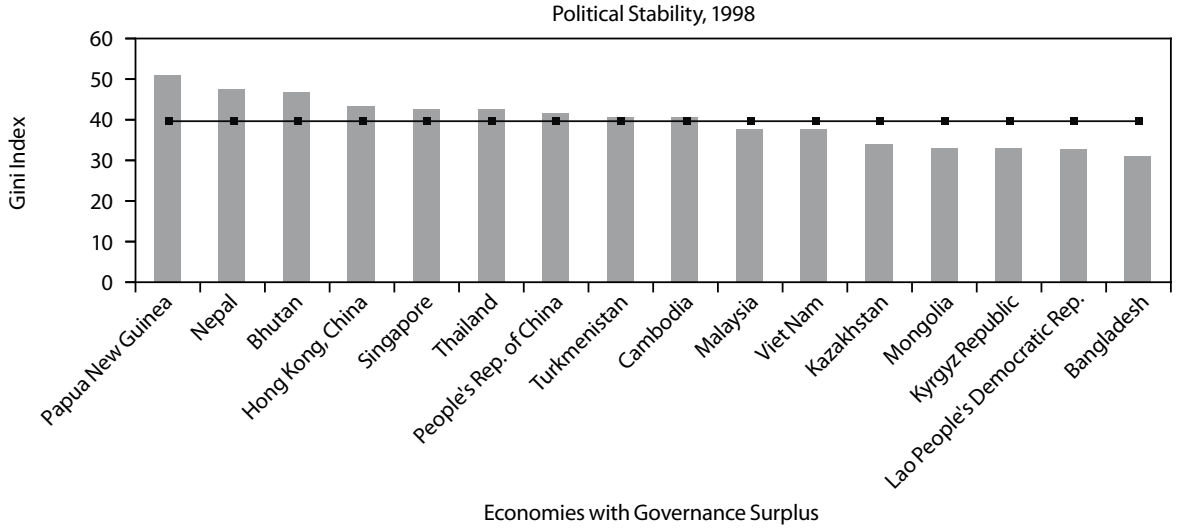
(b1)



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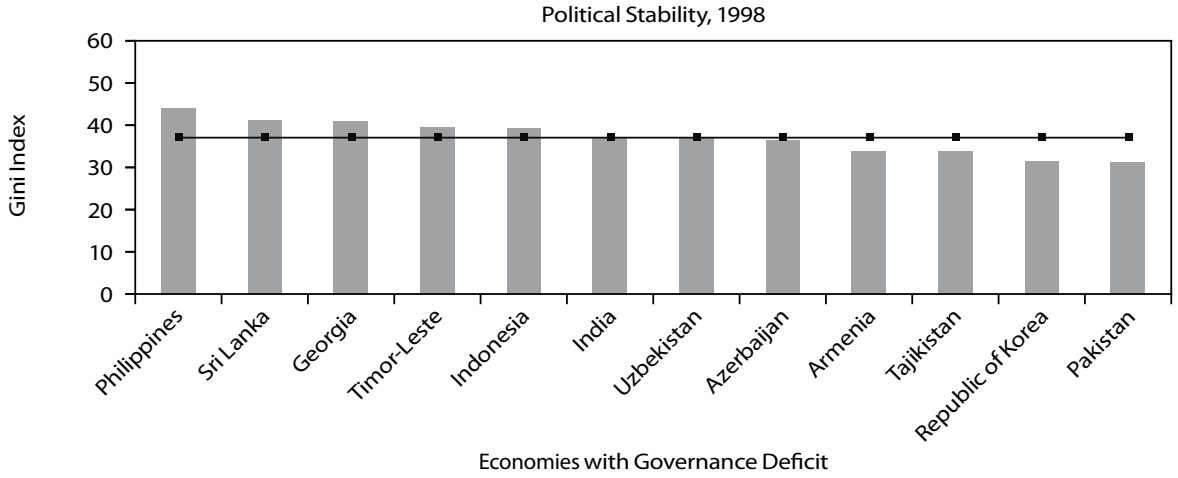

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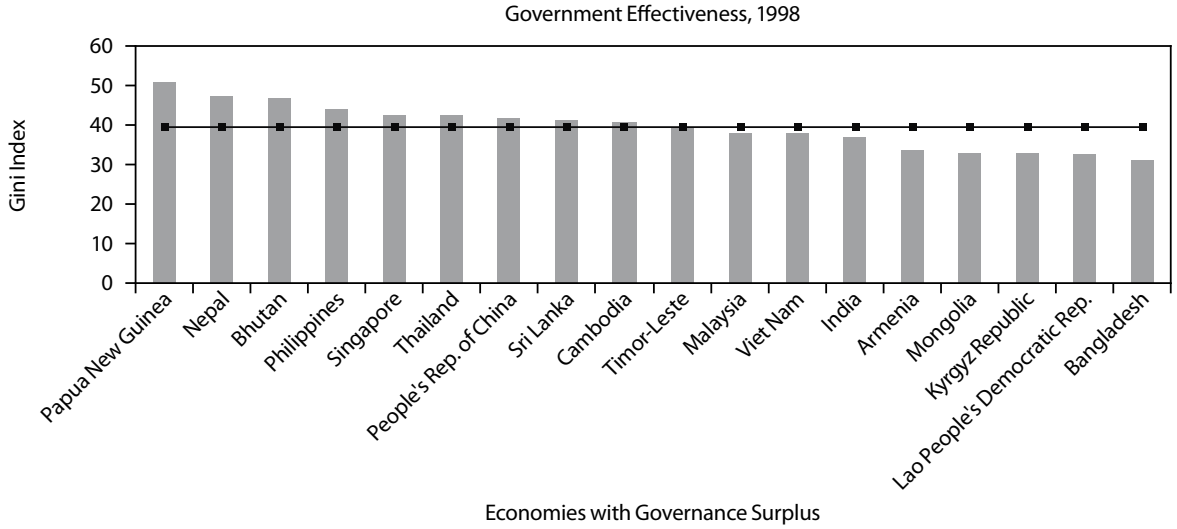

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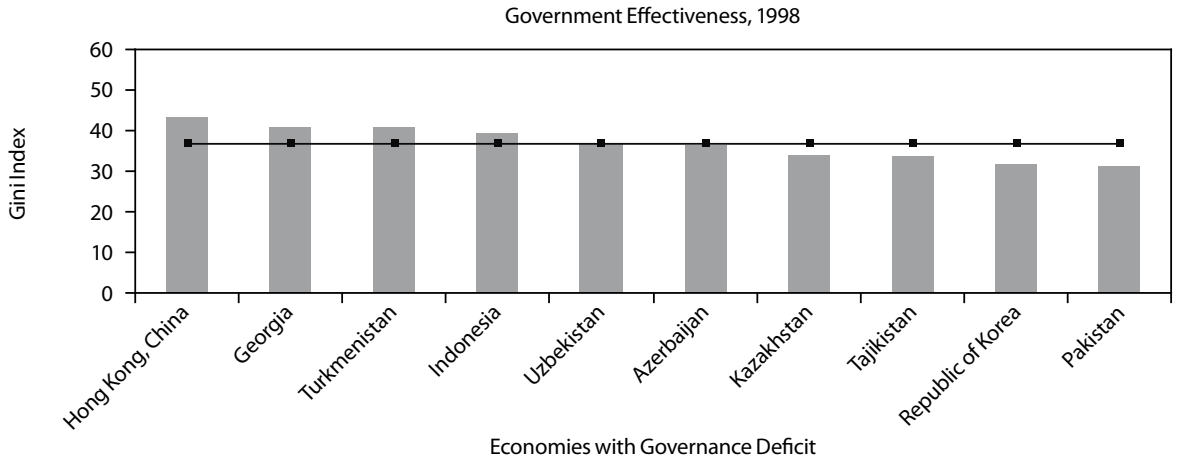

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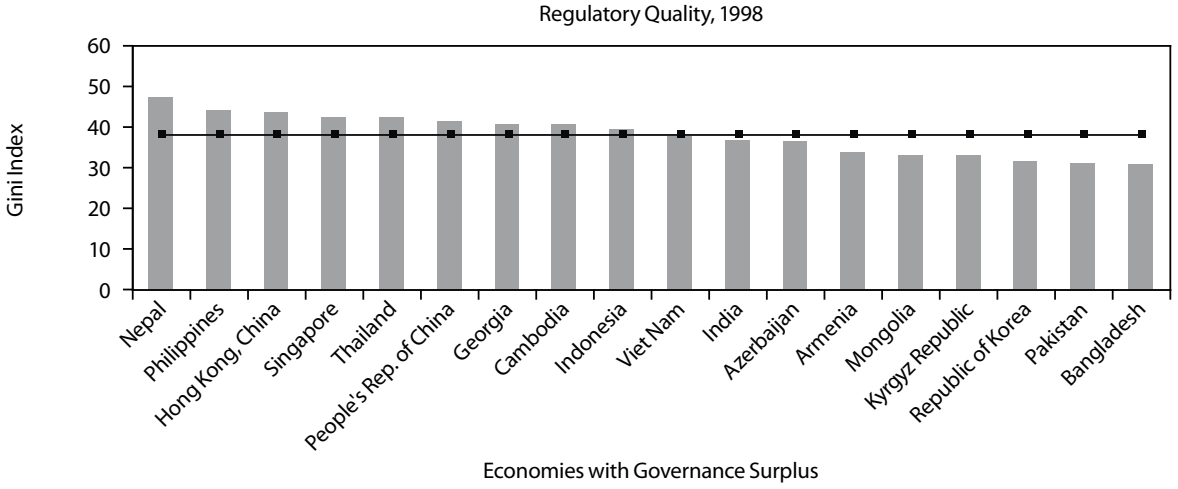

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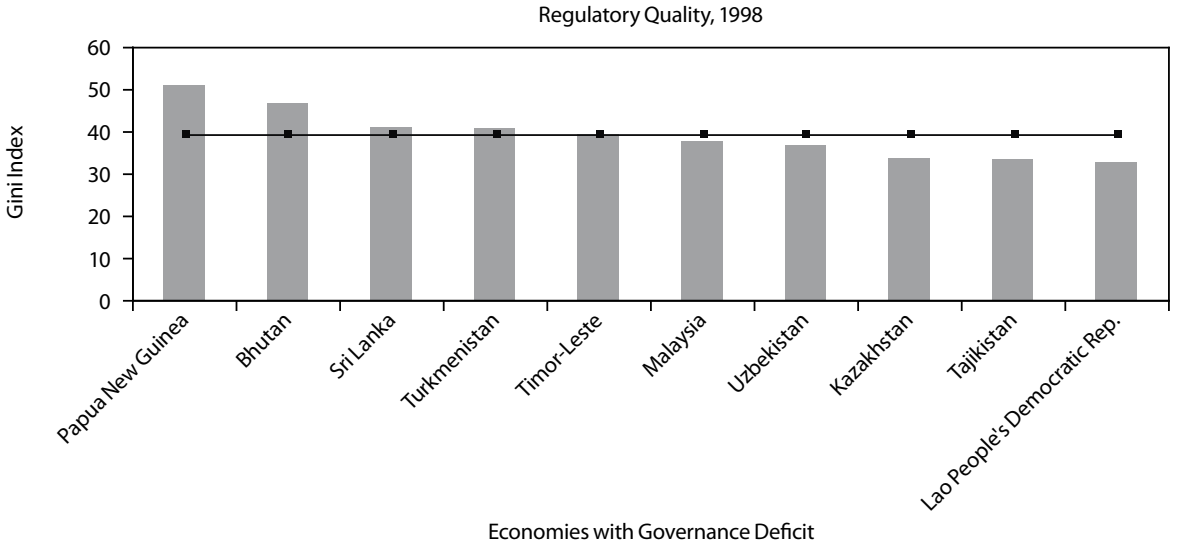

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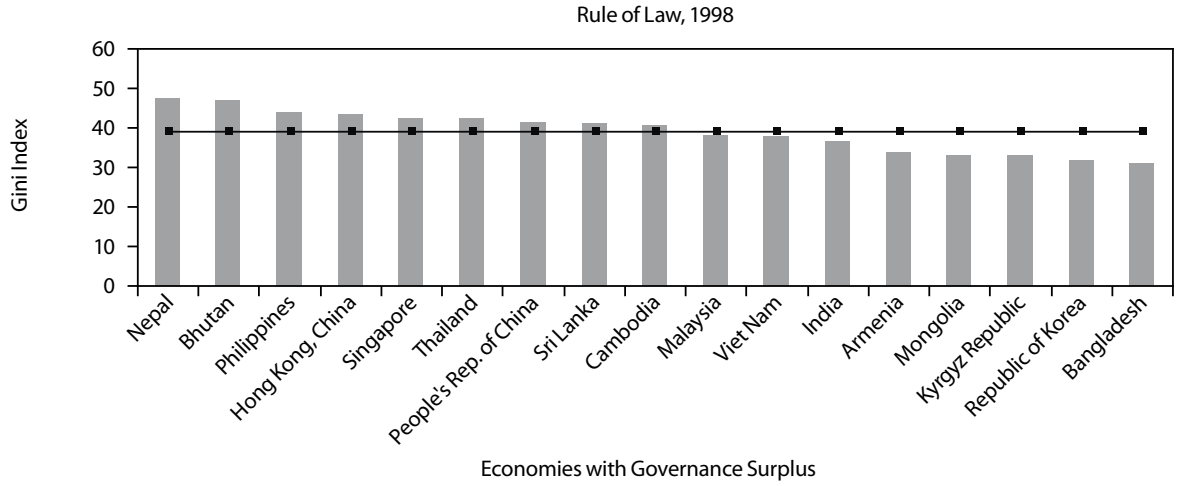

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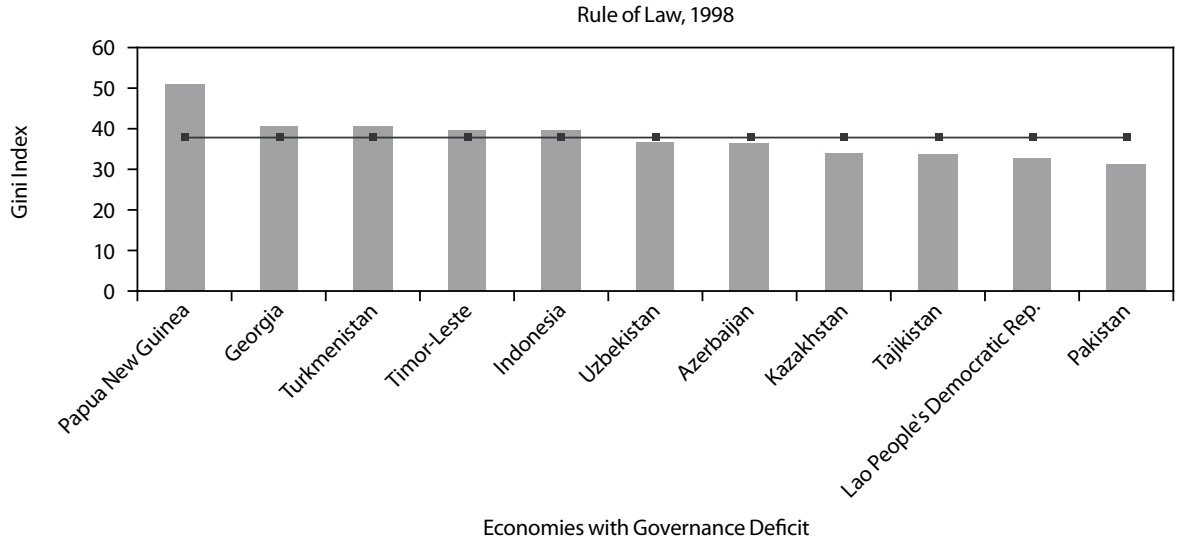

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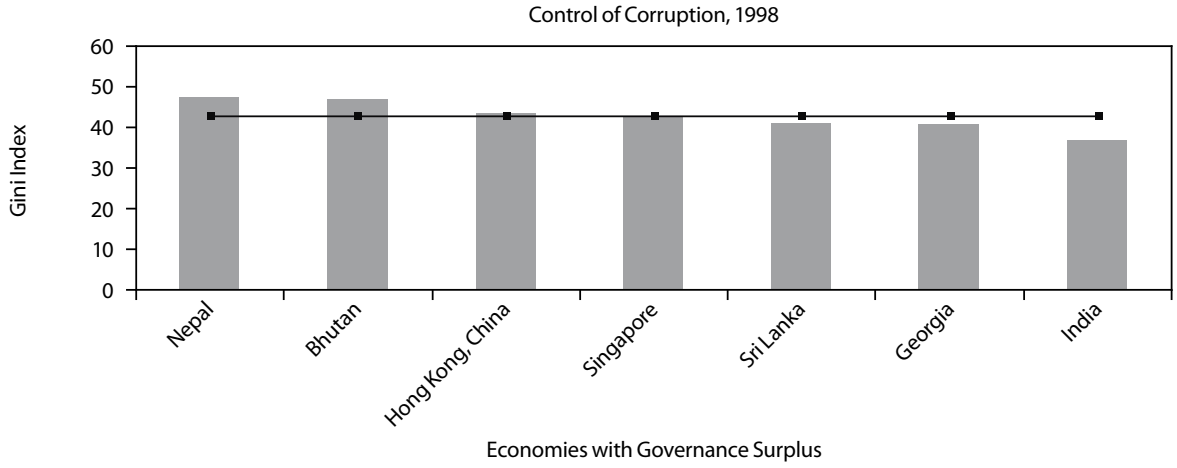

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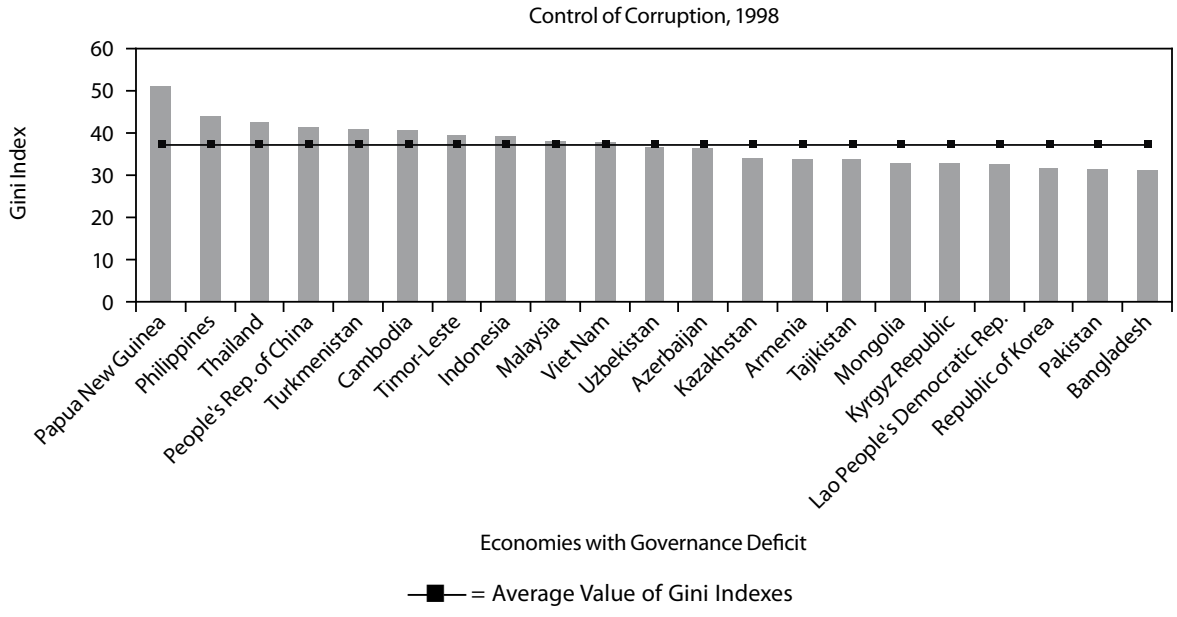


Source: Authors' estimates based on data from the Worldwide Governance Indicators and UNDP (2009).

D. Interpreting the Results

The results presented in the previous section support Quibria's (2006) suggestion that, given the multidimensional nature of governance/institutional quality, uncovering its instrumental role may require going beyond its totality to look at specific dimensions. According to the above results, dimensions of governance/institutional quality with a significant power in explaining the cross-country differences in growth performance in developing Asia are government effectiveness, regulatory quality, and rule of law. These results suggest that Asian economies are not "outliers" as far as the relationship between the quality of these governance dimensions and growth performance is concerned. On the other hand, this study fails to detect such a relationship in the cases of voice and accountability, political stability, and control of corruption. How can these paradoxical results be explained?

One explanation may lie in the measurement problems of these governance indicators. As highlighted earlier, these include issues concerning comparability over time and across countries, biases in expert assessments, correlated perception errors, definitional issues, and reliance on "subjective" data. In the case of the indicator for control of corruption, for example, a frequent criticism is that it lumps together and equally weights responses to questions about petty and grand corruption, leading to concerns over whether it can accurately capture overall corruption in a country (KKM 2006).[18] In the case of democracy, which is closely related to voice and accountability, Bardhan (2008) makes a distinction among three aspects related to: (i) some basic minimum civil and political rights enjoyed by citizens, (ii) procedures of accountability in the day-to-day administration under overarching constitutional rules of the game, and (iii) periodic exercises in electoral representativeness. In the case of India, for example, he argues that while its achievement has been impressive in terms of the third aspect over the last half century, its performance is somewhat mixed in terms of the second. He also notes that, except in several states all these aspects of democracy are weaker at the local village or municipality level than at the federal or state levels in India. It is not clear to what extent the perception-based survey can capture dimensions of governance/institutional quality as complex as voice and accountability.

Apart from the measurement problems associated with governance indicators, recent developments in the literature suggest that there could be other explanations. One is causality between governance/institutional quality and growth performance that is the reverse of what is assumed in the NIE literature, or a causal link from growth to governance/institutional quality that is stronger than the one in the opposite direction. In either case, there may or may not be a correlation between the initial

[18] More recently, Daniel Kaufmann—one of the pioneers of the World Bank's WGIs—argues that corporate capture, in the form of privatization of public policies for self-interests of those with enormous political and economic power but "without bribes having exchanged hands", which, in his view, is in the realm of corruption, was very important in leading to the global financial crisis (Kaufmann 2008). It is not clear to what extent this type of corruption is captured by the control of corruption indicator as part of WGIs.

governance/institutional quality and subsequent growth performance. Fukuyama (2008), for example, notes a view arguing that growth produces a propertied middle class, which then presses for rule of law to protect those rights, and subsequently political participation. Paldam and Gundlach (2008) argue that the causality from governance/institutions to growth would predict a divergence of development, whereas from growth to governance/institutions would predict a convergence of institutions to a level that is consistent with the level of development. Their empirical observations support the hypothesis of the convergence of institutions.[19]

Another explanation is the possible context-dependency of the governance/institutions –growth nexus.[20] This means that, even if the direction of causality goes from governance/institutions to growth performance, it is entirely possible that various components of governance/institutional quality as measured by the WGIs are observed to have differing impact on growth performance, depending on a country's history, its stage of development, the length of the time horizon being investigated, or other specific circumstance. Fukuyama (2008), for instance, argues that state capacity may be more important than either rule of law or democracy at low levels of per capita GDP. This argument appears to be consistent with the casual observations from Figures 2 and 3 that data points are scattered more widely in the cases of voice and accountability and political stability, than in the case of government effectiveness, especially when per capita income is low.

More generally, Rodrik (2008) argues that even though the existence of a causal link from governance/institutions to growth performance is now widely accepted, this does not suggest that one can systematically rely upon improved governance to generate growth over the time horizon that policymakers care about (a decade or two). Improved governance in a particular dimension would be effective in generating growth when the poor governance in that dimension is among the most binding development constraints for a country. Acemoglu (2008) argues that while there is relatively strong evidence showing that the broad clusters of institutions—comprising economic, political, and legal aspects—are essential for long-run economic development, scholars must be modest enough to admit that they are only beginning to understand exactly how specific aspects of institutions influence economic outcomes.

A further possible explanation lies in the role of informal institutions. KKZ/KKM's six governance indicators focus largely on formal institutions, whereas the recent theoretical and empirical studies have shown that informal institutions (and social capital) can complement formal institutions or play a substitutive role when formal institutions are weak, and can explain some of the cross-country differences in growth performance (see earlier

[19] They show that 39 ex-colonial African countries became independent during 1956–1960, with the 14 British ex-colonies starting with relatively democratic constitutions, the 17 French ex-colonies adopting less democratic constitutions, and eight other ex-colonies beginning with democracy levels that were in between; only 8 years after independence, nearly all of the cross-country variation in the level of democracy had vanished, with all political systems converging to almost the same level of autocracy.

[20] And their various dimensions.

discussions). There is a large body of literature that attempts to theorize the role of Confucian values in explaining the high growth of many East Asian economies that were seen to have a weak hold or slow take-up of Western-style formal institutions, such as the PRC and Viet Nam currently, and Republic of Korea; Malaysia; Taipei,China; and Thailand in the 1970s and 1980s (Roderick 1980, Dore 1987, Peter and Hsiao 1988, Tai 1989, etc.). It has been noted that the basic teachings of Confucianism[21] stress the importance of education for moral development of the individual so the state can be governed by moral virtue (informal institutions and constraints) rather than by the use of coercive laws—formal institutions (Levinson and Christensen 2002, Qin 2008). The workings of informal institutions in some East Asian economies may be seen from a relatively high level of trust among people in these societies, as shown in the results of the recent World Values Survey[22] (Figure 7).

One of the questions in the World Values Survey is that "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?" Figure 7(a) shows that the percentage of the respondents who answered "most people can be trusted" is very high for some of the fast-growing East Asian economies, such as the PRC at 52% and Viet Nam at 51%, compared with around 40% for the United States and 30% for the United Kingdom. Figure 7(b) shows a positive relationship between the level of trust and real per capita income on the basis of data covering all sample countries of the World Values Survey. After controlling for the level of income, PRC, Indonesia, Thailand, and Viet Nam are found to have significant surplus in trust.

In the case of the governance/institutions–inequality nexus, it is more difficult to interpret the finding of no correlation presented earlier. To begin with, the literature on the relationship between governance/institutions and income inequality is much smaller and newer than that connecting governance/institutions and growth. So, the former is more poorly understood than the latter. In addition, the measurement problems of the governance indicators, discussed earlier, remain relevant. The possible reverse causality could also make it difficult to discern any link between the initial governance/institutional quality and subsequent income inequality. One may argue that it takes much longer for the governance/institutional quality to affect income distribution than for it to affect growth performance.

Further, Chaudhuri and Ravallion (2007) make a distinction between "bad inequality" and "good inequality". Good inequalities are those that reflect and reinforce the market-based incentives that are needed to foster innovation, entrepreneurship, and growth. Bad inequality, on the other hand, is rooted in market failures, coordination failures,

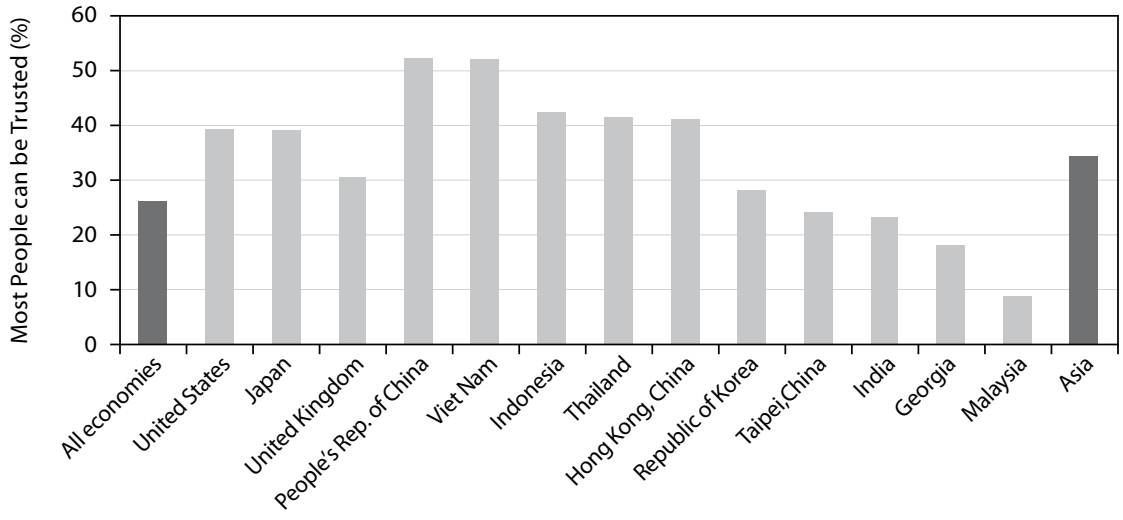
[21] Confucian values that are often emphasized include loyalty, filial piety, thrift, hard work, humanity, importance of education, meritocracy, morality, individual sacrifice, social harmony, etc.

[22] The World Values Survey is a worldwide network of social scientists studying the impact of changing values and beliefs on social and political life. The database makes it possible to examine cross-level links, such as between public values and economic growth; or between environmental pollution and mass attitudes toward environmental protection; or between political culture and democratic institutions. The fifth wave of the survey covers 2005–2008 and 57 countries and contains over 200 variables (http://www.worldvaluessurvey.org).

governance failures, and social exclusion, and often reflects inequality in opportunity. Improvements in governance and institutional quality are likely to reduce bad, but not necessarily good, inequality.

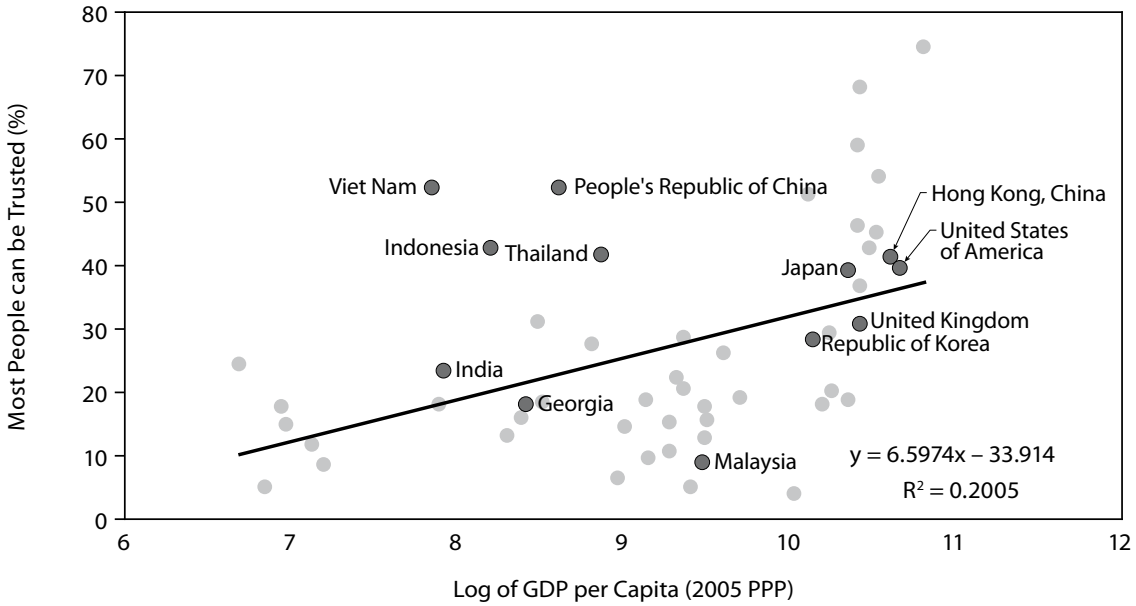
Figure 7: World Values Survey on Trust Among People

(a)



Source: Authors' estimates based on the fifth wave (2005–2008) of the World Values Survey (http://www.worldvaluessurvey.org), downloaded 27 October 2009.

(b)



Source: Authors' estimate based on the World Values Survey (http://www.worldvaluessurvey.org) and World Bank's World Development Indicators Online.

Similarly, Easterly (2007) makes a distinction between "structural" inequality and "market" inequality. The former reflects such historical events as conquest, colonization, slavery, and land distribution by the state or colonial power; it creates an elite by means of these nonmarket mechanisms. In his view, structural inequality is unambiguously bad for subsequent development in theory. Market inequality, on the other hand, arises owing to uneven success in free markets across different individuals, cities, regions, firms, and industries. Market inequality has ambiguous effects, and cannot be eliminated entirely by improvements in governance and institutions. If rising inequality in many developing Asian economies in recent years reflects to some or large extent "good inequality" or "market inequality", then it can be argued that it will be less correlated with governance/institutional quality.

IV. Summary and Conclusions

The long-run positive association between governance and institutional quality, on one hand, and growth and level of income, on the other, is strong and incontrovertible, both conceptually and empirically. A two-way causal link between the two is also well-recognized in the literature. That is, while institutions and their implied governance results may well be "supply-side" factors that drive economic growth, they are also attendant products of growth itself—partly because rising incomes and education levels create a "demand" for them. It has become a major task, therefore—and an active field of research—to tease out the relative importance of one or the other direction of causality. A further area of research has been motivated by the fact that the concept of "quality" of governance/institutions is multidimensional. It is therefore quite possible that—and important to find out whether—certain aspects of governance/institutional quality are more relevant or critical than others in determining growth performance for specific countries during specific periods.

At least as much is suggested when a simple classification framework is applied to developing Asia. Under the widely used KKM/KKZ composite governance indicators produced by the World Bank, it is found that developing Asian economies with government effectiveness, regulatory quality, and rule of law in surplus in 1998 grew faster on average during 1998–2008, by 1.6, 2.0, and 1.2 percentage points annually, respectively, than economies with governance in deficit in these dimensions (oil- and gas-rich countries and Macao, China excluded). These results provide support for a causal link leading from good governance and institutions to superior growth performance, and dispel the notion that developing Asian countries are "outliers" from this relationship.

However, such a causal link cannot be detected in the cases of voice and accountability, political stability, and control of corruption. This provides room for several possible explanations, ranging from the measurement problems associated

with governance indicators to reverse causality, the context-specific nature of the governance/institutions–growth nexus, and the role of informal institutions.

There are also convincing arguments for an association between governance/institutional quality, particularly political accountability, democracy and control of corruption, on one hand, and income distribution and inequality, on the other, although this association is empirically much weaker. A two-way causality between the two is widely agreed, with the causal link from lower income inequality to better governance/institutional quality arguably stronger. Applying the same classification framework to developing Asian economies, it is found that levels of income inequality across economies with governance in surplus are not very different from those with governance in deficit in almost all dimensions. Possible explanations for such results range from an imperfect understanding or specification of the underlying causal relationships; measurement problems associated with governance indicators; and the varying nature of rising inequality in the region.

Compared with other regions in the world, developing Asia scored relatively high in government effectiveness and rule of law, but low in political stability and absence of violence, and voice and accountability, with scores of regulatory quality and control of corruption lying in between, in 2008. Compared with the OECD grouping and Eastern Europe, developing Asia still has a lot to catch up in all governance dimensions. During 1998–2008, however, a large number of developing Asian economies saw their governance scores improving in various dimensions, although a large number of economies also slipped. In the areas of rule of law and control of corruption, more economies improved than slipped. There was also a significant increase in the proportion of countries with surplus in control of corruption (compared with an international reference line), from 26% to 47%. These results suggest that significant improvements in governance do and can occur within a relatively short period of time.

What do all these mean for policy? As stated at the beginning of this paper, the intrinsic value of good governance and institutions as ends of development in their own right is now universally accepted and underlies the very notion of inclusiveness. Therefore, good governance should be pursued in all dimensions as a basic development goal. To maximize its instrumental value, the current literature points to the need for recognizing the context-specific nature of the linkages between governance and institutional quality, on one hand, and growth and inequality, on the other, and for focusing on the aspects that are most binding and critical to a country's development in a particular period. There is also a need for cautioning against unguarded expectations that any institutional improvement would lead to better growth performance and more equal income distribution in a relatively short period of time. Taken at face value, the empirical findings in this paper seem to suggest that strengthening government effectiveness, improving regulatory quality and rule of law, and control of corruption could well be used as what Fukuyama (2008) calls potential entry points of development strategies for many countries in the region.

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About the Paper

Juzhong Zhuang, Emmanuel de Dios, and Anneli Lagman-Martin review the growing literature on governance and institutions—focusing particularly on the measurement of governance and institutional quality, and direction of causality between institutional development and economic development. They also examine where developing Asia stands in various widely used measures of governance/institutional quality relative to the rest of the world, and the power of governance indicators in explaining cross-country variations in growth performance and income inequality in the region.

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