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## **RATIONALIZED BUREAUCRACY AND RATIONAL COMPLIANCE**

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## SUMMARY

The focus of this paper is on the relationship between the trustworthiness of the bureaucracy, citizen compliance, and economic growth. We argue that a relatively competent and impartial bureaucracy represents a set of institutional arrangements that are essential for economic and political development. Rationalized bureaucracy promotes contingent consent, that is, voluntary or quasi-voluntary compliance with government policies. Without contingent consent, government enforcement costs are very high. However, contingent consent is not always easy to construct or maintain. It requires citizen confidence that the collective outcome of the policy is in the long-term interest of the regulated citizens, that government actors will keep their side of policy promises, and that government actors will punish the noncompliant. A relatively honest and competent bureaucracy provides necessary assurances and signals to citizens that the playing field is level and that government actors will keep policy promises. Further, through reputational and salary mechanisms, it links the incentives of bureaucrats with the interests of those being asked to comply. Thus, it creates the basis for credible bureaucratic commitments.

We then create a **typology** of compliance problems based on two features of public goods problems: (1) whether the benefits of citizen compliance are purely nonexcludable or partially excludable; and (2) whether noncompliant behavior is perfectly visible and relatively easy to monitor or imperfectly visible and costly to monitor. We conclude that a rationalized bureaucracy always promotes greater compliance but that different aspects of bureaucracy matter for the distinct issues in each of the four cells in our typological

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**matrix.** Moreover, a rationalized bureaucracy is particularly important when coordination is at the root of compliance.

The combination of a competent bureaucracy and high levels of citizen compliance should, theoretically, increase the level of private investment in the economy, an important variable in models of economic development. Evidence from nineteenth century Europe suggests a strong correlation between economic growth and the rationalization of the state's bureaucratic apparatus. However, the extant historical research also suggests that different states developed **different** bureaucratic forms at different times with consequences for **sectoral** growth and rate of change. The experience of the **contemporary Asian countries** suggests a strong link between a relatively competent and honest bureaucracy, citizen compliance with bureaucratic regulations, and private **investment.** **Drawing on various studies by the World Bank and other recent analysts, we** present some preliminary evidence to this effect.

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IRIS REPORT

**Rationalized Bureaucracy and Rational Compliance”**

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Given the relative economic success of the early industrializers and of Japan's postwar modernization efforts, it is not surprising that other countries have aspired to emulate them. For the most part such emulation seems to involve adoption of policies. While sound economic policies are an important component of high speed economic growth, they are not a sufficient condition for development. Equally important are self-enforcing institutions that secure property rights, provide credible commitments between government actors and private agents and among private agents, limit government incursions into private lives (Weingast 1993), and efficiently supply public goods. While there is increasing interest in the role of institutions in development, most analysts tend to emphasize an interventionist state (see, e.g. Amsden 1989; Wade 1990; World Bank 1993) or a bureaucracy insulated from politics and certain kinds of societal demands (Evans 1992; World Bank 1993: 167-81).

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**We take a somewhat different line. We follow North in arguing that, “The existence** of a state is essential for economic growth; the state, however, is the source of man-made economic failure.” The aspects of the state that contribute to economic growth are its capacity to provide wealth-sharing mechanisms (Campos and Root forthcoming), to create a bureaucratic structure in whose competence and relative honesty citizens have some confidence, and to execute (not just promulgate) those policies that support economic growth. Undergirding these aspects of the state are institutional limits on governmental **power that are self-enforcing, that is, it is in the interest of those being constrained to** uphold the limits upon them. Thus, “getting the prices right” is only part of this story. Equally important is the promotion of contingent consent by the citizenry (Levi forthcoming) and effective implementation. Without the first, the state lacks adequate support to act; without the second its acts are meaningless.

A complex network of institutional arrangements is essential for economic and political development, but the focus of this paper is on only one of them: the quality of the bureaucracy as measured by adherence to meritocratic standards in promotion and recruitment and by effective means of detecting and deterring improper practices. Our aim in this paper is to begin the process of (1) laying bare the connection between the design of bureaucratic institutions and citizen compliance and (2) establishing the connection between compliance and development. The policy implications of this approach are clear: the preconditions for development are partially manipulable by the state, and a **well-**designed bureaucracy can contribute to a well-functioning economy. Less evident but of **equal importance is the probability that a relatively competent, fair and impartial** administration also promotes the kind of cooperation essential for democracy.

Our thesis shares some of the features of the Weberian view, but it is nonetheless distinct. Weber (1978: 956-1005) observed the simple correlation between a modern economy and a bureaucracy characterized by functional definition of duties, meritocratic appointment, **full-time** devotion to administrative tasks, and relative insulation **from** society. Bureaucracies, for Weber, depend upon the existence of a monetary economy, but they are also an important tool in the construction of advanced capitalism. Silberman (1993: 37-8) refutes Weber on this point. He makes the rather strong claim that the **argument for a relationship between industrialization and bureaucratization is “a false one..** It is **difficult** to conceive of how bureaucratization and industrialization are related, unless one is willing to concede that political and economic elites are prescient about the administrative forms necessary to carry out industrialization within their societies and have the capacity to enforce those functional changes.” His evidence of variation in both the form of bureaucracy and the timing of industrialization in France, Japan, Britain, and the United States is compelling but only of the finding that the link requires greater theoretical specification before dismissing it.

A further problem with the Weberian view is that it overemphasizes bureaucratic insulation from politics. Peter Evans (1992) somewhat modifies Weber in this regard. He **argues that development seems to require a “developmental” state characterized by a** bureaucracy with the corporate coherence of the Weberian ideal type, relative insulation **from** the cacophony of societal demands, and sufficient “embeddedness” in society so that the bureaucrats possess “accurate intelligence, inventiveness, active agency and sophisticated responsiveness to a changing economic reality” (148). However, as Evans

notes, such embeddedness may initially increase but later hinder state capacity to promote economic growth.

The Weberian approach to development, even as modified by Evans, fails to identify and occasionally misstates the mechanisms by which a competent and relatively impartial bureaucracy promotes development. The correlation may exist, but the evidence that bureaucracy is one of the crucial factors in the key cases of development remains unclear. A better model of the relationship **requires** elaboration of the mechanisms by which **bureaucracy might influence development. What work does the bureaucracy do in these cases?** How, precisely, does that work improve the prospects of economic and political development? Is bureaucracy the only kind of institution that can perform those roles?

In this paper, we address neither the origins nor design of possible institutional alternatives to bureaucracy. Our concern is with the institutional features and mechanisms that support a bureaucracy capable of producing credible commitments and credible threats that make compliance in the long-term self-interest of those being asked to comply. **In our model, the institutional design of the bureaucracy and the behavior of its agents act** as signaling mechanisms to actors in the private economy. It signals the likelihood that current effort in the form of compliance will yield future rewards if not always immediate benefits. Its signals are believed because of institutional arrangements that enable bureaucrats to make credible commitments about both policy implementation and the safeguarding of property rights.

Weber focused on the dependence of a modern bureaucracy on an advanced economy. We emphasize the dependence of an advanced economy on a rationalized bureaucracy that promotes rational compliance. Briefly, the logic of the argument is as

follows: **Contingent consent (Levi 1988 and forthcoming) with government policy is a** necessary ingredient of development. Consent increases quasi-voluntary compliance, which in turn lowers the cost of governance and increases citizen tolerance of government experimentation and occasional mistakes. Governments can increase contingent consent with government regulations by making it rational to comply with them, that is by assuring long-term benefits. However, in most of the cases of concern to us, such a contract is possible only if government actors can provide credible commitments that government can **protect property rights, deliver on the returns from the individual investment, and detect** and punish potential defectors among both citizens and bureaucrats. The institutional design of the bureaucracy can play a significant role in providing these assurances. A relatively impartial and competent bureaucracy enhances citizens' perceptions that the government is trustworthy, and it enhances expectations of rewards from rule-adherence and cooperation. As a result, citizen compliance is more **frequent** where bureaucrats are competent, impartial, and non-predatory. Where bureaucrats are incompetent or corrupt, compliance is seldom a maximizing strategy for agents in the private economy, since bribery and illegal activity will tend to yield higher rewards. Noncompliance leads to additional waste and economic misallocation, since both concealment of illegal practices and enforcement of the law are costly. Moreover, widespread noncompliance renders even well-designed and legally enacted development strategies unlikely to succeed.

First, we elaborate the argument that motivates the research. Then we offer support for our theoretical argument about the relationship between bureaucratic design citizen compliance, and economic development with evidence **from** nineteenth and twentieth century Europe and the U.S. and **from** contemporary Asian economies. We find that the

**high-performing economies are those which have benefited from a political-administrative** apparatus that encourages impartiality and rewards non-predatory behavior and competence on the part of civil servants. By contrast, the economies in the region that have been the slowest to develop are beset by corrupt and incompetent bureaucracies that foster shirking, rule-avoidance, and official theft rather than productivity and **rule-adherence**.

This research contributes to the literature on development by highlighting the **significance of institutional (in this case, bureaucratic) design in the development** enterprise. Research on the newly-industrializing and would-be-industrializing economies has disproportionately focused attention on the specific policies pursued by the new industrializers and the way in which these policies have contributed to economic performance. Our research recognizes the importance of sound policy while demonstrating that sound policy is insufficient if problems of institutional design and implementation are neglected. We provide evidence to refute the naive view taken in some of the rent-seeking literature that the public sector is necessarily debilitating to the economy. Instead, we demonstrate that the state can play a central role in facilitating the successful organization of markets without supplanting those markets in favor of a system of centralized control.

## 1. **THE ARGUMENT**

### **1a. The relationship between bureaucratic trustworthiness and citizen compliance**

Among the prerequisites of economic and political development are institutional arrangements and property rights that promote productive uses of resources and that

**minimize social waste (North 1981; Levi 1988; North and Weingast 1989; North 1993; Weingast 1993).** Crucial are efficient government regulations that reduce rent-seeking, on the one hand, and provide incentives for growth, on the other. Given efficient government regulations, of equal importance is compliance with those regulations, particularly relatively low-cost compliance. Indeed, development and citizen compliance are inextricably linked. Development requires well-specified and secure property rights; however, the state's ability to specify and enforce property rights is always imperfect, and **some specification of rights is always left in the private domain. This private ordering can be noncompliant, as in the informal sector, or it can be compliant. Noncompliant ordering entails inefficiencies (since resources are spent avoiding detection or punishment, and since the threat of detection influences firms' choices of technology), and noncompliance weakens the power of the state to implement policies that foster development.** Development requires not only an appropriate property-rights regime but also compliance and cooperation in implementing that regime.

Most of the innovative literature, especially that which has some grounding in principal-agent and game theory, is on bureaucratic compliance or corruption, not on citizen compliance.<sup>1</sup> Concerns with rent-seeking, efficiency and deadweight loss, and bureaucratic opportunism **dominate the** discussion. There is **relatively little theoretical** work on what features of the bureaucracy, other than coercion and monitoring, induce the regulated to comply.<sup>2</sup> The economics literature that most centrally considers regulation

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<sup>1</sup> See, esp. Krueger (1974), Williamson (1975) and Montinola (in progress).

<sup>2</sup> Among the exceptions are Rose-Ackerman (1978) on corruption; Heimer's work on "reactive risk" (1985), considerations of regulatory strategies by Ayres and Braithwaite (1992) and by Scholz (1984), and the work on contingent consent by Levi (1990, forthcoming). This is largely a literature in

emphasizes punitive threats despite considerable **evidence that such deterrence is often** ineffective.<sup>3</sup> Only recently have economists and political economists begun to recognize the importance of credible commitments, leadership and “corporate culture” in inducing **compliance.**<sup>4</sup> Political psychologists are now emphasizing the role of “duty heuristics”.<sup>5</sup> that lower government’s transaction costs of monitoring and coercion by increasing the disposition of the regulated to comply, put in extra effort, and tolerate government mistakes. One possible consequence is an extension of the capacity of state actors to **introduce beneficial developmental policies that may carry short-term costs. There is a** greater latitude for government actors engaging in long-term or risky schemes.

Such willing obedience with the laws requires (see Levi 1988 and in progress):

- 1). recognition **that the collective outcome is in the long-run interest of the** regulated citizens;
- 2). an arrangement of incentives so that compliance is in the self-interest of the regulated (strong condition) or, at least, that the costs of compliance are bearable (weak condition);
- 3). assurances that the regulators will produce the promised policies, i.e. credible commitments; and

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political science, sociology, and law. The economics literature tends to focus on salaried workers and agents rather than citizens not on the payroll; its solutions to opportunism lead to concepts such as team production that have little bearing on regulatory compliance.

<sup>3</sup> This literature builds on Becker 1968 and on Stigler 1970. For an insightful recent critique of this approach see Tsebelis 1990.

<sup>4</sup> See, for example North and Weingast 1989, Clague 1993, Miller 1992, and Kreps 1990.

<sup>5</sup> See, e.g. Pinney and Scholz 1992.

- 4). assurance that the regulators will sanction the non-compliant, i.e. credible commitments to those considering complying and credible threats against those who are not.

In other words, citizens must believe the policy is a good one, that they will lose little by complying and may even individually gain, and that implementation will produce the desired effect and be fair.

Compliance can be a by-product of sanctions or incentives, but its rate is likely to be higher when government actors also appeal to the ethics and norms of the citizenry. **This** means constructing or encouraging among the relevant citizens a desire to promote the polity's welfare so that the citizen considers social benefits as well as individual costs in her utility function. It means creating or encouraging norms of fairness in which the cooperation of others makes it only right to cooperate in turn. Compliance that has both a strategic and ethical element is contingent consent (Levi in progress); it is obedience to laws that is conditional upon a positive assessment of government policy (at least in general if not in every specific), government procedures for making and implementing policy, and the behavior of other citizens. Contingent consent creates multiple motivations for compliance and provides government actors with the greatest possible leeway for mistakes.

Rationalized bureaucracy enhances the probability of contingent consent. Properly designed bureaucratic institutions signal a credible commitment on the part of state agents that: (1) the social benefits of compliance will be distributed fairly; (2) delayed returns **from compliant behavior** will not be **withheld**, and (3) **compliant individuals will not be**

“suckered” by defectors. They signal that the playing field is level, and that it is therefore worthwhile to play the game.

Rationalized bureaucracy is likely to promote and meet norms of fairness, provide gains to both bureaucrats and citizens for investments in reputations of trustworthiness, and bolster confidence in the likelihood of policy success. Norms of fairness arise in circumstances that bring “an individual face to face with the same individual over a whole sequence of interactions” and over time (Coleman 1990b: 254). Within firms, these repeat interactions can produce a “corporate culture” that establish how managers will respond to contingencies not covered (and usually not coverable) in the initial contract with employees (**Kreps** 1990). Violation of that culture undermines the trustworthiness of the managers and reduces compliance. Bureaucracies also develop corporate cultures as a means to evoke commitments in the face of uncertainties. A culture of relative honesty and competence offers some assurance to citizens about the nature of future interactions-- which matter in current decisions by citizens about compliance. If there is some expectation of future cooperation, then compliance is more likely.

Properly designed bureaucracies also tend to link the incentives of bureaucrats with the long-term interests of those being asked to comply. Each party to the transaction has an incentive to keep her side of the bargain; the bureaucrats have an investment in **maintaining** the culture and the citizens desire future as well as present benefits.

Rationalized bureaucracy implies promotion and other rewards to bureaucrats on the basis of demonstrations of competence and trustworthiness. Thus, rationalized bureaucracy creates gains from investment in reputation by the **bureaucrats**, but it also rewards trustworthiness by the regulated. To the extent government is a source of contracts,

licenses, etc., and to the extent the bureaucracy ensures competitiveness for those benefits by its relative impartiality, citizens will derive high payoffs from demonstrations of trustworthiness, merit, and innovation.

An impartial and competent bureaucracy **further** increases the attractiveness of compliance and cooperation by creating the basis for long-term gains **from** cooperation. To the extent firms and individuals have confidence that government agents will be consistent in their application of rules and will be effective in delivering promised services, **including enforcement of the rules on others, they are more likely to comply and even to** take certain kinds of economic risks that are the *sine qua non* of the development enterprise. Such risks may take the form of investments in capital stock, willingness to engage in implicit contracts, or even more simple willingness to trust strangers as trading partners.

A relatively competent and fair bureaucracy creates a network of social relations between bureaucratic agents and those with whom they are interacting in which a trustworthy reputation carries benefits. For the bureaucrat, this translates into information flows, successes, and willingness of the regulated to tolerate occasional experiments and mistakes. For the regulated, this translates into a higher probability of receiving licenses **and contracts for which a good reputation matters. A good reputation as a partner in** relations with a competent and impartial government is a signal that a person or firm is **likely** to be trustworthy in other encounters. As a number of scholars have indicated, such trustworthiness has significant market payoffs. However, if the bureaucracy is corrupt, compliance with government does not signal trustworthiness and hence does not confer a

reputation as a trustworthy trading partner. Compliance, in these circumstances, has no value beyond its ability to help the individual avoid punishment.

This line of argument is consistent with that of Putnam (1993) and others (see, esp. Coleman 1990a, esp. 300-24 and Granovetter 1985) who argue that a dense network of social relations is a source of social capital in the form of trust and norms of reciprocity. Such social capital produces a capacity for civic engagement which in turn enhances the probability of economic and political development (also see Hardin 1993). Like Putnam (1993 : 157), we argue that while “economics does not explain civics,...civics does explain economics.” Unlike Putnam we are interested in components of a “civic culture” which are not rooted in the historical development of community and secondary associations. Our view is that the state can foster compliance through institutional design. The state cannot create a civic culture, but it can create a close substitute: by establishing the right institutions, the state produces trust among citizens and trust between citizens and state actors. Moreover, without confidence in the state and particularly in the bureaucracy, a dense network of social relations may lead not to economic and political development but to economic and political **conflict** against the state or to the creation of informal markets that are alternatives to state-promoted policies.

**Our argument extends the principal-agent model, in which monitoring, coercion,** and side payments do all the work in explaining compliance. Our argument stands in contrast to a model in which the primary explanatory variables are socialization of the regulated and internalization induced by culture, be it religious, familial, or corporate. While both an efficient set of principal-agent relations and a compatible culture obviously affect cooperation, we claim that equally (and perhaps more) important are the signals

**provided** by the bureaucracy **that its commitments are credible and fair and that, therefore,** compliance will result in long-term individual as well as collective gains.

In the process of analyzing the effects of bureaucratic structure on citizen and firm cooperation, we are able to enter the debate over the role of government regulation. We are arguing against the proposition that both state intervention and bureaucratization are inherently wasteful. We are also arguing against the more narrow proposition that provisions that permit rent-seeking are the fundamental source of non-compliance and low **productivity. Rather, we are arguing that state intervention, properly constructed, can be** productive. In pointing to the importance of the state and institutional design we join a growing literature (e.g., North 1981, Bates & Krueger 1993; Geddes 1994). We are not, however, claiming that government actors and civil servants must actively promote economic policies, a common theme in much of the contemporary literature on the Asian “tigers” (Amsden 1989, Wade 1990, Haggard 1990, and Evans 1992). The level of appropriate state intervention is an empirical question, and the extent of productive activism may well vary with a number of factors not yet explored. What is clear to us, however, is that government must do more than establish and enforce the appropriate property rights regime (North 1981). It must do more than create or sustain the social capital embodied in secondary associations (Putnam 1993). Government must also establish its own trustworthiness to refrain from predation and uphold its promises.

**1b. Which aspects of bureaucracy matter for what sorts of compliance?**

Bureaucratic rationalization does not have the same effect on rates of compliance in all areas of regulation. The Weberian ideal of a hierarchical and centralized bureaucracy

can actually create opportunities for certain types of corruption by the regulated as well as the regulators (see Rose-Ackerman 1978: 173-9 *and passim*). To better understand how the existence of bureaucracy might support the sort of compliance that promotes economic development, it is necessary to distinguish which features of the bureaucratic **structure influence what kinds of compliance**. To do this requires, first, a **typology** of compliance, second, a **typology** of bureaucracy, and, third, an analysis of the link between the forms of compliance and the relevant aspects of the bureaucratic design.

Compliance problems can be classified into four basic types, each with distinct implications for the state's ability to induce compliance. First, the behavior that the state seeks to regulate can be either perfectly visible and hence easy to monitor, or imperfectly visible and hence costly to monitor. Second, the benefits of cooperation can be either purely nonexcludable or partially excludable. In other words, a single individual's decision to cooperate can result in benefits that are purely social-as when a person contributes to an orderly community by refraining from **theft** or violence-or in benefits that accrue in part to society and in part to the **cooperating** individual alone. Combining these two variables yields four distinct ideal-typical compliance problems, as depicted in Table 1.

**[Insert table 1 about here]**

In general, compliance is less problematic when some of the benefits of cooperation are excludable (Olson 1965), **as in the lower cells of table 1 (cells III and IV)**. As the size of the excludable benefit to a cooperator increases, compliance problems are transformed **from prisoner&dilemma-like** situations into assurance or coordination problems. In the extreme case where the private, excludable benefit is very large, compliance or cooperation becomes trivial, since cooperative behavior emerges strictly as a result of the

**excludable payoff to cooperation (or of the excludable punishment for noncooperation).**

The latter case corresponds to simple coercion and presumes the existence of a centralized enforcer capable of manipulating costs and benefits.

The upper cells of Table 1 (cells I and II) represent the standard problem of collective goods provision.<sup>6</sup> What distinguishes them is ease of monitoring. Where individual compliance is difficult to monitor (cell I), achievement of the collective good generally requires coercion. Taxation is a case in point—the state monitors compliance at **a cost (and punishes non-cooperators), but the state achieves economies of scale through centralized monitoring.** Absent this centralized monitoring capacity, cooperation is **unlikely since each individual must spend resources monitoring each other's behavior.**

**In cell II, where benefits are purely nonexcludable but low-cost decentralized** monitoring is possible, compliance may be achieved by conditional cooperation. Citizens can condition their choices on the observed past behavior of others. For well-known reasons (Taylor 1987[1976]), conditional cooperation becomes more problematic as the size of the group becomes larger. When this is the case and when the polity cannot be federated into sufficiently small groups, coercion is the predominant solution. Even so, there is more compliance, at least in advanced industrial democracies, than an account **based only on narrow self-interest can explain. Appeals to ethical standards and norms of fairness** may account for a large part of the difference (Levi 1988; Pinney and Scholz 1992).

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<sup>6</sup> We are assuming, for the moment, that citizens value the result of mutual cooperation such that the total benefits outweigh the total costs of cooperation for any individual. For those who do not, this is not a collective goods problem but a straightforward instance of punishment for breaking rules established by others.

**The organization of informal-sector markets, in which the state cannot generally be** called upon to enforce property rights, provides an example of the compliance problems represented by cell II of Table 1. Peddlers who occupy public property, perhaps illegally, have the incentive to locate their enterprises in favorable locations and to monopolize the use of these sites. However, if many individuals seek to occupy the same site, resources are wasted in the competition, and property rights may be insecure. Hernando de Soto (1989) provides an account of the ways in which peddlers solve this problem through **decentralized assignment of property rights.**

When cooperation produces purely nonexcludable benefits, the dominant strategy is to defect, since each individual maximizes her payoffs by choosing not to cooperate **regardless of the choices made by others. In contrast, when the benefits of cooperation are** partially excludable, individuals benefit directly from their own cooperative choices and indirectly from the cooperative choices of others. This situation is represented in the lower cells (III and IV) of Table 1. These cells refer to problems of coordination or **assurance, where information about what others are doing is the critical determinant of** compliance.

A credible and competent bureaucracy is able to transform some compliance **problems from prisoners'-dilemma-like situations into coordination-&c situations, and it is** able in some cases to facilitate cooperation by providing centralized monitoring. First, a competent and credible bureaucracy can confer reputational benefits on those who comply with regulations. These benefits are an excludable good available only to cooperators. Second, the bureaucracy has superior powers of monitoring, and through inspections, impositions of fines, and issuance or suspension of business licenses, it provides public

information about the behavior of firms and individuals in the economy. Even if the state does not have the coercive power to eliminate noncompliance, it can facilitate decentralized monitoring through these reputational effects if the bureaucracy is credible and competent.

A firm with a reputation for compliance with regulations gains an advantage over others who do not have such a reputation, since the products sold by the reputable firm are expected to be of higher quality. A reputation for compliance plays the same role in compliance problems as a nonsalvageable asset plays in Klein and Leffler's (1981) model of contractual performance. In that model, the quality of a firm's product is impossible to assess in advance of purchase. The firm credibly commits to producing high-quality goods by setting the price above the competitive price and then dissipating this rent in the purchase of visible, non-salvageable assets, in effect conferring brand-name reputational benefits on the firm. Since consumers know that these assets are nonsalvageable and will be sacrificed if the firm is forced out of business, consumers rationally expect the firm to produce high-quality goods. If the firm "cheats" by selling low-quality goods, consumers stop buying the firm's products and the firm loses the value of its nonsalvageable assets.

Private ordering is employed in some cases to provide reputational benefits and overcome other compliance problems (see de Soto 1989 for an extended discussion). For example, some Manila taxi drivers have been organized by well-known Manila hotels to provide safe trips in a city known for assaults on cab passengers. The cabs are marked so that prospective passengers can distinguish them from other cabs not associated with the hotels. Association with the hotel operators **confers** a reputation on this group of cab drivers that makes their services more valuable to passengers. Since the hotel operators

have **the** incentive to **provide** guests with safe **transportation**, they can be relied **on** to monitor the behavior of drivers and cut their ties to those who are untrustworthy.

Frequently, however-especially as the size of the group grows **large**—decentralized enforcement and monitoring becomes untenable. In some neighborhoods of New York, shoeshiners have submitted to public regulation of their siting in response to increasing competition from newcomers, whose inexperience and low-quality service gave shoeshiners a bad reputation. Along with the new regulation came official recognition **through** uniforms for the **shoeshiners** and **special** chairs for the shoeshine customer, providing easy identification of the officially approved shoeshiners. In Seattle's Pike Place Market, decentralized assignment of stalls and sites for buskers gave way to centralized coordination.

The Manila taxicab example illustrates the importance of credibility and competence of the bureaucracy. For the association with hotel operators to be of value to the cab drivers, the hotel must maintain a reputation as a trustworthy **firm**. Drivers associated with a disreputable hotel would suffer **from** the association. Likewise, a reputation for compliance, along with licenses that assist in decentralized monitoring, are of value only if gained through interaction with a reputable bureaucracy. If the bureaucracy is corrupt, a disreputable firm can gain licenses and operate free of government interference through bribery. This type of "cooperation"-in which official approval results from rent-seeking competition rather than from honest application of rules-confers no reputational benefits on the successful rent-seekers. In addition, the monitoring **function** of the bureaucracy is ineffective, since it is publicly known that possession of a license or a clean record of regulatory compliance is meaningless and may have been bought rather than earned.

In order for the bureaucracy to provide reputational benefits and to facilitate decentralized monitoring, it is essential that bureaucrats demonstrate credibility that they will deliver on policy promises and **refrain** from bribe-taking and other improper practices. This is accomplished in part through design of the bureaucracy in such a way that bureaucrats have incentives to gain competence and to adhere to rules. Large investments in maintaining and promoting civil service careers are comparable to purchases of visible, non-salvageable assets. If high-quality civil servants are rewarded for their **efforts**, then **outsiders can expect a bureaucrat's nonsalvageable investment in a civil service career to** signal credibility and trustworthiness. High-quality civil servants may be more costly to recruit and retain than those without equivalent merit, but they are more likely to produce and implement good policy.

A rationalized bureaucracy contributes to greater compliance for each of these distinct compliance problems. However, different aspects of the bureaucracy matter for the distinct issues posed in each cell. Compliance that is difficult to monitor and has **non-excludable** benefits (Cell I) requires a bureaucracy that has the competence to monitor and punish. Competence combined with procedures perceived as equitable may further increase the rate of compliance, however. Cell II problems have similar requirements **when coercion is the solution, but for conditional cooperation to take place** bureaucrats must be able to convince citizens that their interactions will go on over time and with either the same individuals or with replacements who operate with the same information and rules of operation. Compliance that is difficult to monitor but with partially excludable benefits (Cell III) improves with institutional arrangements that make it in the self-interest of both bureaucrats and citizens to continue to uphold their end of the

contract. Cell IV requires a **bureaucracy** that **compensates trustworthiness** and competence. Bureaucrats receive promotions and citizens **future** rewards as a consequence of current behavior. Bureaucratic structure that inhibits bureaucratic corruption and rewards bureaucratic capability directly affects coordination problem compliance, but it also has a strong indirect effect on other compliance situations. A set of institutional arrangements and an ethos that supports impartiality drive out the benefits of partiality and corruption (Rose-Ackerman 1978: 137-5 1). They also may help create a **normative commitment that evokes extra effort from both bureaucrats and citizens** (Clague 1993).

There is considerable contemporary debate over how best to organize a bureaucracy so as to ensure its **competence**, relative impartiality, and **restraint**. **Silberman (1993)**, for example, distinguishes between organizationally oriented and professionally oriented bureaucratic rationalization. The first closely fits the Weberian ideal of a hierarchical and rule-based administration. The second relies more on shared educational and social experiences among civil servants. The first characterizes the historical development of bureaucracy in France and Japan and the second the experience of Britain and the U.S. Wade (1993) compares the Indian and Korean irrigation bureaucracies. He finds that the **Korean bureaucracy was more effective. He locates its success in rules that require the** bureaucrats to be answerable to the local community. Kiser's (1991) investigation of tax bureaucracies emphasizes arrangements that permit principals to monitor and punish opportunistic agents.

All of these approaches to bureaucracy **identify** as important institutions that: (1) select a qualified pool of civil servants by filtering out those without the requisite skills; (2)

**link promotion to performance while in office, (3) create a well-defined and appropriately**

valued career path for bureaucrats; and (4) monitor bureaucrats' behavior and punish those found to be engaging in improper practices.

The rationale behind the first of these objectives is obvious: filtering out incompetence at the recruitment stage is a necessary condition for the maintenance of an effective bureaucracy. The final item on the list, monitoring and punishment of corrupt bureaucrats, is also straightforward. The remaining objectives require elaboration. Linking promotion to performance fosters competence and signals the consequent commitment of bureaucrats to effective implementation of policy. The establishment of a well-defined career path for bureaucrats and of rewards for long years of service enhances the investment in the job. Citizens can, therefore, expect bureaucrats not to jeopardize that valuable asset by engaging in improper practices.

The well-defined career path, coupled with competition for posts, confers a scarcity rent upon a civil service career that bureaucrats will act to protect. Although corrupt civil servants also have investments in their posts,<sup>7</sup> the means to maximizing their ends is quite different where the incentives are for corruption rather than relative honesty. This is consistent with models of self-enforcing contracts and credible commitments in research on industrial organization and transaction-cost economics (Williamson 1975; Klein and Leffler 1986). In these models, the possibility of shirking or cheating on a contractual obligation compels parties to design contracts in which the incentive to refrain from

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<sup>7</sup> Hilton Root pointed this out to us.

cheating outweighs the incentive to cheat. The prospect of losing the **rent stream** is sufficiently unattractive so that contractual performance becomes “self-enforcing.”

To the extent the civil service structure produces bureaucrats with significant investments in their careers and links career advancement with merit, the bureaucrats are more likely to be both honest and competent. To the extent the regulated perceive the bureaucrats as honest and competent, they are more likely to comply with policies that serve their long-term interests, at least as long as they have assurances that the bureaucrats are likely to deliver.

## **2. BUREAUCRACY, COMPLIANCE, AND DEVELOPMENT: HISTORICAL EVIDENCE FROM EUROPE AND THE UNITED STATES**

Some important recent research begins to indicate the links between competent and honest bureaucracy and economic growth in Europe and the United States in the eighteenth, nineteenth, and twentieth centuries (Levi 1988; Brewer 1989; Evans 1992; Mann 1993). The relationship is complex and multi-faceted (Silberman 1993), but it is nonetheless suggestive and deserving of further and more detailed research. What it suggests is that rationalization of the state accompanied economic growth and political development virtually everywhere. However, different states developed **different** bureaucratic forms at different times with consequences for **sectoral** growth and rate of change.

Brewer (1989) documents the important role the construction of a fiscal bureaucracy played in undergirding the military and economic success of Britain in the seventeenth and eighteenth centuries. France had a large bureaucratic apparatus, but it

was neither particularly efficient nor particularly impartial. By creating a bureaucracy that was effective in raising revenues and in ensuring that the revenues reached the governmental coffers, Britain was able to support its military campaigns and to path the way for support of an economic infrastructure. Levi (1988: 122-44) reports how the existence of a trustworthy (relatively) fiscal bureaucracy made it possible for William Pitt the Younger to introduce the first modern income tax in 1799, which in turn became the basis for state roles that facilitated economic growth. Citizen confidence that the **excisemen and other tax agents would refrain from predation, in the sense of abrogating property rights, and refrain from corruption, in the sense of pocketing the revenues for themselves,** was a critical element in their acquiescence to the income tax. Silberman (1993 *passim*) offers support for his contention of a relationship between the degree of political uncertainty and the form of bureaucratic rationalization that arose, and he further demonstrates that both the professional and organizational orientations solved critical political problems for the society.

The size of the state is not the critical variable in explaining economic growth in the nineteenth century. Mann (1993: 358-509) compellingly demonstrates that the size of the state relative to civil society grew in the eighteenth century but declined in the nineteenth in Austria-Hungary, France, Great Britain, Prussia-Germany, and the U.S. However, state intervention in and **infrastructural** support of the economy grew. What seems to have occurred and seems to have had an important economic effect was a reorganization of state roles. The balance of state activities became, generally, more civil and less military. Some streamlining-and bureaucratization-of state functions also took place. There was an increase in the roles performed by government, but, according to Mann the result was

not the consolidation of unitary states but rather the creation of a series of bureaucratic and political domains.

The historical record begins to clarify the nature of the relationship between bureaucracy, citizen compliance, and economic development. Industrialization and bureaucratization often occurred in the same countries in the nineteenth and early twentieth centuries. There were, however, different patterns of bureaucratic rationalization just as there were different patterns of industrialization. However, in **virtually all the cases, there appears to be a link between an elaboration of the civil functions of the state, particularly in regards to economic infrastructural development, and economic growth.**

According to Mann, effective government required the “embeddedness” of high level state actors, both politicians and civil servants, in their societies and dominant classes (also see Evans 1992). This conclusion demands greater specification, however. In terms of tax bureaucracies, embeddedness was clearly less important than monitoring and other **hierarchical means of controlling agents (Kiser 1994; Levi 1988). Where a close connection between civil servants and economic class actors matters is among the upper reaches of those bureaucracies that made economic policy or regulated industries, such as long-haul railroads, where cooperation among various industries and government officials was essential to efficient and profitable management. In both of these very important and illustrative cases, bureaucratic trustworthiness and competence increases the rate of compliance in a way that facilitated the production of infrastructure and, ultimately, economic development.**

### 3. BUREAUCRATIC COMPETENCE, CITIZEN COMPLIANCE, AND DEVELOPMENT: EVIDENCE FROM ASIA

Among the Asian countries there is considerable divergence in economic performance by countries whose political leaders espouse the goals and methods of East Asia's economic giant. Measured by GDP growth rates and other indicators of standards of living, Singapore stands out as a dramatic success and the Philippines as an equally dramatic failure in the pursuit of development through a market economy shepherded by an interventionist state. In between lie Hong Kong, Taiwan, South Korea, Malaysia, Thailand, and Indonesia, in descending order of economic performance. A striking correlation exists between the aggregate economic indicators and a less widely studied institutional feature of these seven countries: the quality of their bureaucracies, measured **by adherence to meritocratic standards in recruitment and promotion and by effective means of detecting and deterring improper practices.** Countries with more rationalized bureaucracies tend also to be the countries that are more economically successful. In Singapore open examinations select civil service recruits on an objective meritocratic basis, and promotion through the ranks depends on performance and educational attainment. An autonomous anti-corruption agency is vigilant in its enforcement of the rules. In the Philippines, corruption is a banality, and efforts to stem it are either insincere **or ineffectual, or both. Recruitment and promotion are regularly manipulated by a** political spoils system, and kinship and cronyism trump merit at all levels of the civil service. Singapore, Taiwan, Korea, Malaysia, Thailand, Indonesia, and the Philippines fill out a continuum of institutional performance that mirrors closely their places on the continuum of economic performance.

We argue that **this connection** is not coincidental. Based on previous research at the macro-institutional and macroeconomic levels (Campos 1993), on a theoretical model that draws on our own work (Levi 1988; Levi in progress) and on research in institutional economics, comparative politics, and political economy, we argue that the design of **bureaucratic institutions that signal the relative impartiality and competence of bureaucrats** is one of the features of high-speed economic growth.

Given the paucity of data and the difficulty of inference **from** whatever is available, evaluating the relationship between bureaucratic competence, citizen compliance, and development is a daunting task.<sup>8</sup> To provide a coherent analysis requires the combination of arguments on the basis of first principles with the available information. We will proceed as follows. First, we will show that the bureaucracy in most of the high performing Asian economies (**HPAEs**) is considered more reputable than the bureaucracy in other newly industrializing countries for which we have data. Second, we provide evidence to suggest that a competent and honest bureaucracy might induce greater **compliance from the private** sector. Third, we will attempt to **demonstrate** that the level of private investment is partly a function of the degree of compliance. Finally, we will show that private investment has been significantly higher in the **HPAEs** compared with other low and middle income countries. In this rather crude and indirect way, we provide

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<sup>8</sup> We know of only two studies that attempt to provide detailed comparisons of bureaucratic **structures** in Asia. Wade's (1993) paper on the irrigation bureaucracies in Korea and India makes a strong case for the importance of certain kinds of **institutional** features for promoting compliance and attaining goals. The key is in an effective system of monitoring and incentives based in local **communities**. Wade **argues that the Indian model, borrowed from Britain, is rigid and unproductive in contrast with the Korean model.** Mauro (1993) offers an econometric analysis of the relationship between bureaucratic inefficiency, political stability, and economic growth in 70 countries between 1971-83. He **finds that bureaucratic corruption lowers private investment.**

support for the assertion that a more reputable bureaucracy leads to greater compliance and development.

Having higher than average contact with government regulation of the economy, the business sector is a good source for eliciting views on the reputability of the bureaucracy. Its opinions are a good indicator of the bureaucracy's competence and integrity. The 1992 World Competitiveness Report presents such (subjective) valuations. The publication reports results of a survey of 3,300 executives from around the world on a wide variety of questions.<sup>9</sup> For comparative purposes, the HPAEs survey groups the seven other newly industrializing countries. A subset of the questions relates to the valuation of a country's bureaucracy, some more closely than others:

- (1). Do you consider state interference in your industry generally negative or generally positive (318)?
- (2). Do government subsidies keep obsolete industries alive or are they directed towards future winners (320)?
- (3). Does fiscal policy discourage or encourage entrepreneurial activity (336)?
- (4). Is the government transparent or non-transparent to its citizens (340)?
- (5). Do improper practices (such as bribery and corruption) prevail or not in the public sphere (343)?
- (6). Does or doesn't lobbying by special interest groups distort government decision making (344)?

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<sup>9</sup> The survey questionnaire was sent to 18,000 individuals of which about 3,300 responded. So, how random is this? What does it mean?

Business executives in a country ranked their responses to each question along a scale from 1 to 6. Table 2 presents the rankings for each of the questions.

**[Insert Table 2 about here]**

Five of the **HPAEs** are in the top half of the rankings for all the individual criteria. Thailand and Indonesia are at the top of the bottom **half in** four of the six criteria. The **HPAEs** dominate the rankings in the overall **ranking**.<sup>10</sup> For our rankings the analysts transformed their responses to a scale of 1 to 100 and ranked the countries on each **question. Countries with higher response scores (closer to 100) ranked higher. These** survey results suggest that business executives of **HPAEs** consider that bureaucracies more reputable than those in the other newly industrializing countries in the survey.

A more objective based measure complements the results of the survey. We have data on salary differentials between the public and private sector across different levels for five of the **HPAEs**, the Philippines, and three Latin American countries.<sup>11</sup> Given that the quality of the pool of applicants for civil service jobs depends in part on salary differentials, the smaller the differential the more likely it is that the overall quality of the bureaucracy will be better. Table 3 lists the differentials for these nine countries. Clearly, relative pay across all three levels is significantly higher on average in the **HPAEs**.

**[Insert Table 3 here]**

We argued earlier that citizen compliance to regulations is likely to be higher the more reputable the bureaucracy is. In the context of business regulation, this translates

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<sup>10</sup> The overall ranking is based on the Borda score of each country. The score is obtained by summing up the ranks across the six criteria. The theoretical underpinning for this methodology is found in Sen (1976).

<sup>11</sup> The data for the public sector are for the civil service. Public enterprises are excluded. when allowances and bonuses are included, the relative differentials in Korea practically disappear.

**into firms spending less time trying to get around the regulations and more time on** productive activity. If firms believe that bureaucrats are competent and honest, they will be confident that regulations are there primarily to correct for market failures and that none of their competitors can easily obtain special treatment. Regulations will not be formulated haphazardly and will not be applied discriminately. In other words, the reputation of the bureaucracy can be a parsimonious signaling device to the business community indicating the nature of the regulatory regime. Is the regime characterized by **a “first pay-first served” basis, where regulations are formulated to better serve the needs** of special interests? Or is it driven by objective, relatively non-political criteria, that is, market failure?

Knowing which type of bureaucratic regime they are in conditions the responses of firms to regulations. If they believe they are in a rent-seeking environment then they will expend resources on rent-seeking activity. If they believe regulations that legislators and bureaucrats designed to correct market imperfections, firms will be more inclined to use resources for productive profit making ventures (Olson 1981). That is, at the margin resources will be allocated to more productive activities. This means private industry will invest more in real capital.

Figure 1 presents part of the results of a recent World Bank survey of businesses (of all sizes) in a Latin American country.<sup>12</sup> The goal of the survey was to obtain firms perceptions of different types of regulations.

**[Insert Figure 1 About Here]**

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<sup>12</sup> In Stone (1993).

One question aimed to get at the cost of complying with regulations. Firms were asked what percentage of their sales they would be willing to pay in order to avoid certain regulations.<sup>13</sup> As Figure 1 indicates, the amounts involved for some regulations are staggering. For instance for customs regulations, which have gained notoriety worldwide for creating a “hospitable” environment for bribery and corruption, firms were willing to pay anywhere between 2% to 3.3% of their sales. In the current recessionary environment in which profit to sales ratios of firms are at a low 10% to 15%, these figures suggest that firms allocate the equivalent of 13% to 33% of profits to unproductive activity (Bhagwati 1982). Or alternatively, better implemented customs regulations could leave firms with as much as 33% more in profits that can then be invested in new equipment, new technology, worker training, etc. all of which would improve their performance (and thus the economy’s) over time.

If our hypothesis is correct then we should observe higher levels of private investment in countries with more reputable bureaucracies. In Table 4, we compare investment patterns in the HPAEs with patterns in the Philippines and five of the newly industrializing countries included in the executive survey in the World Competitiveness Report-Brazil, India, Mexico, Pakistan, and Venezuela.

[Insert Table 4 About Here]

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<sup>13</sup> The methodology underlying this question is referred to as the contingent valuation technique. The technique has been used for surveys on valuations of public goods. A World Bank research project that will develop the use of this technique in measuring regulatory compliance costs is currently under way (“Measuring Business Compliance Costs in Developing Countries: A Contingent Valuation Approach”). The question in the above survey was thrown in to see how businesses would respond and how serious information and revelation problems might be. The results are encouraging. The range of percentages for any particular regulation is small suggesting that businesses on average did not respond strategically or ignorantly to the question.

Public investment as a percentage of Gross Domestic Product (GDP) is more or less the same across all the countries. However, private investment is higher in the HPAEs. This suggests that the business sector in the HPAEs has been more willing to allocate resources to productive endeavors and, less directly, that the bureaucracies in the HPAEs are better able to induce compliant behavior to business regulations.

#### CONCLUSION

Economic development depends fundamentally on capital accumulation, i.e., investment. Higher levels of investment have been shown to generate higher and more rapid growth rates.<sup>14</sup> We have argued that investment will tend to be higher in countries **where the bureaucracy has a good reputation and where it secures property rights.** By implication then, we have been able to identify a link between bureaucracy, compliance and development: the more impartial and competent the bureaucracy, the greater the degree of compliance by the business community, the higher the level of investment, and the more rapid the growth of the country.

However, we must end with several caveats. First, good bureaucratic design is not a stand-alone solution. Its effectiveness requires that it be part of (embedded in, if you will) a set of governmental institutions, market institutions, and policies that together work to support political and economic development. Second, simply imposing a bureaucracy will not do. An administrative apparatus must grow out of the polity. Its emergence can be guided, but layering an ideal administrative apparatus on a set of incompatible institutions

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<sup>14</sup> See, for instance, *The World Bank, 1993*.

**is a recipe for ineffective institutions. Third, changing a bureaucratic apparatus may be the** single hardest task in structural adjustment.<sup>15</sup> However, the response should not be to throw up our hands but to search for the answer of how best to achieve this daunting but necessary goal.

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<sup>15</sup> Hilton Root claims this is the finding of much of the literature. Also, see Geddes (1994) for a discussion of the constraints on political leadership that inhibit reform.

**TABLE 1: TYPOLOGY OF COMPLIANCE PROBLEMS**

		Compliance	
		Difficult to Monitor	Easy to Monitor
<b>Benefits</b>	<b>Not Excludable</b>	Coercion with costly monitoring I	Coercion; conditional cooperation II
	<b>Partly Excludable</b>	Assurance with self-enforcing contracts III	Assurance with conditional cooperation IV

TABLE 2: RANKINGS BASED ON SELECTED CRITERIA

	[1]	[2]	[3]	[4]	[5]	[6]	Borda Scores	Overall
<b>HPAEs</b>								
<b>Hong Kong</b>	5	4	1	6	2	2	20	3
<b>Indonesia</b>	7	8	9	9	14	13	60	9
<b>Korea</b>	4	5	8	7	7	5	36	5
<b>Malaysia</b>	2	2	2	2	6	3	17	2
<b>Singapore</b>	1	1	4	1	1	1	9	1
<b>Taiwan</b>	3	3	5	4	5	6	26	4
<b>Thailand</b>	6	7	3	5	9	10	40	6
<b>Others</b>								
<b>Brazil</b>	14	13	14	13	13	14	81	12
<b>Hungary</b>	10	9	13	14	4	8	58	8
<b>India</b>	13	14	10	8	11	12	68	11
<b>Mexico</b>	8	6	11	3	8	4	40	6
<b>Pakistan</b>	9	10	7	10	10	11	57	7
<b>South Africa</b>	11	12	12	12	3	7	57	7
<b>Venezuela</b>	12	11	6	11	12	9	61	10

Source: World Competitiveness Report 1992.

**TABLE 3: RATIO OF PUBLIC TO PRIVATE SECTOR SALARIES (in percentages)**

	Senior Level		Mid Level		Entrv
	A	B	A	B	
<b>HPAES</b>					
<b>Singapore</b>	114 <sup>b</sup>	114	115 <sup>b</sup>	115	107
<b>Korea<sup>a</sup>, Rep. of</b>	69.3	69.3	57.1	57.7	58.7
<b>Taiwan</b>	65.2	60.3	63.5	65.8	60
<b>Malaysia</b>	40	33.3	34.3	50	NA
<b>Thailand</b>	47.1	46	37.2	34.9	78.9
<b>Other Asia</b>					
<b>Philippines</b>	27.7	24.3	25	32.5	62.5
<b>Latin America</b>					
<b>Trinidad and Tobago</b>	63.53 <sup>b</sup>	63.53	76.88	77.92	NA
<b>Venezuela</b>	29.54	42.38	53.4 <sup>b</sup>	53.4	NA
<b>Argentina</b>	24.1 lb	24.11	28.57 <sup>b</sup>	28.57	NA

Source: The East Asian Miracle. Economic Growth and Public Policy 1993, Chapter 4.

a Estimates of private sector salaries include allowances and bonuses so that the ratios are actually higher. Data are from a survey of companies with 500 or more employees.

b Average is used for both sub levels A and B.

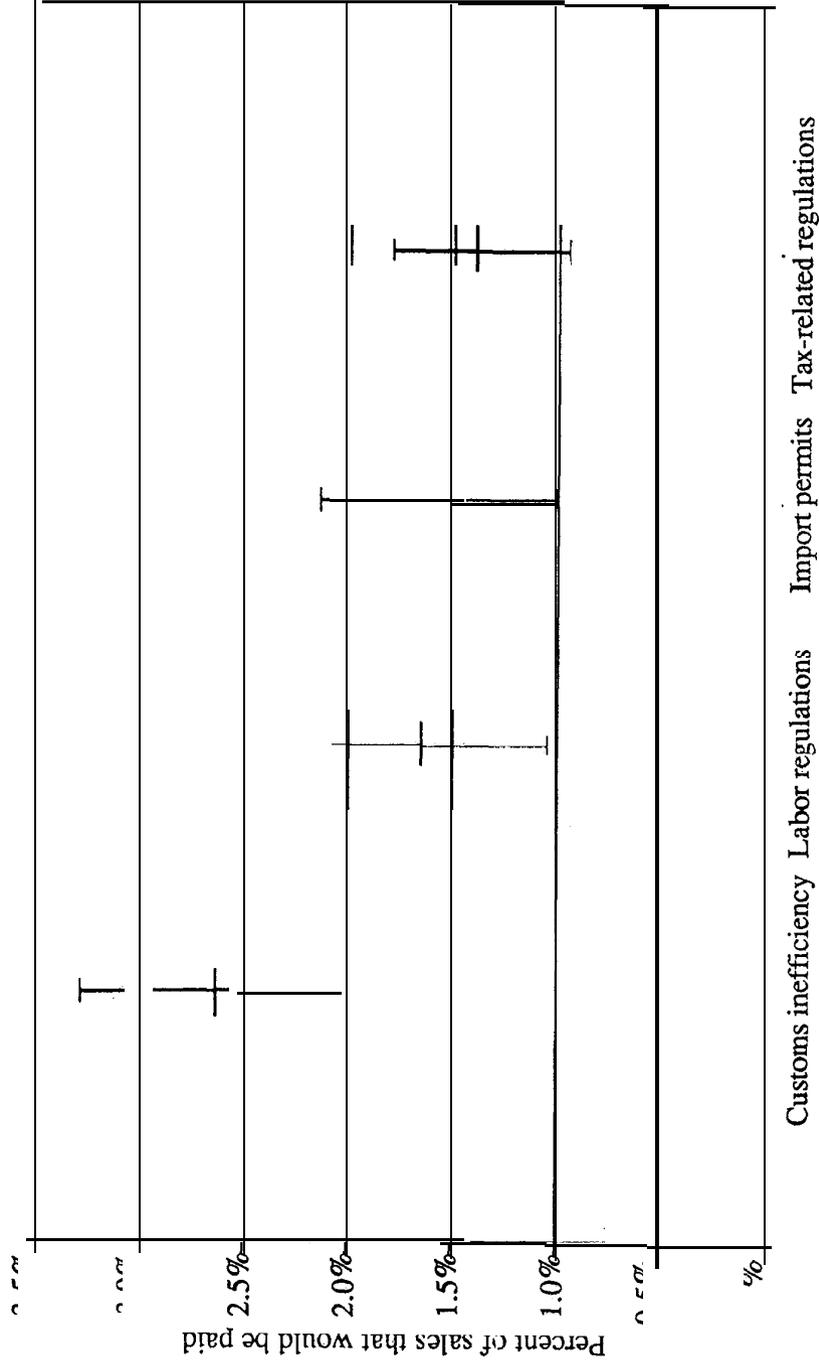
**TABLE 4: INCREMENTAL CAPITAL-OUTPUT RATIOS AND PRIVATE INVESTMENT/GDP  
HPAE'S AND SELECTED ECONOMIES 1981-1989**

<b>Countries</b>	<b>Average, 1981-1989 ICOR</b>	<b>Average, 1981-1989 Private Investment/GDP</b>
<b>Hong Kong</b>	3.16	19.17
<b>Korea</b>	3.36	24.17
<b>Thailand</b>	3.24	17.03
<b>India</b>	3.25	9.37
<b>Taiwan</b>	2.68	12.2
<b>Pakistan</b>	2.46	6.42
<b>Indonesia</b>	5.32	15.47
<b>Malaysia</b>	5.41	15.82
<b>Singapore</b>	6.12	29.67
<b>Brazil</b>	8.05	11.97
<b>Philippines</b>	11.45	14.12
<b>Mexico</b>	12.28	11.34
<b>Venezuela</b>	<b>75.76</b>	<b>8.34</b>

Notes: Private Investment as a percent of GDP in real (1985) local currency terms.

Source: World Bank Data

**Figure 1**  
**Difficulties Associated with Government Regulations, Policies, and Requirements**



Note: The figure represents the statistically significant range with an 80% confidence level.  
 Source: Stone (1993).

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