

Market Economy and Government Regulations in Nigeria

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Abstract

In a modern market economy, government influence extends to almost all areas of social life. Government cannot only influence a market economy through financial monetary and other forms of metro-policies, but also lay down the rules of the game in the field of micro-enterprise development by such means as economic regulations. This paper explores the role of regulation in economic performance in Africa using an econometric model. More precisely, it assesses through econometric modeling the impact of variations in the quality of regulation on economic performance. Although Olson's, et al., (1998): earlier studies have looked at governance as a cause of cross-country productivity or income differences, which was further buttressed by Kaulman and Kraay, (2002). This paper along the line differs in concentrating on regulation rather than wider governance issues. The results confirm that "good" regulation is associated with higher economic growth.

Keywords: economic growth; regulation; governance; institutions.

1. Introduction

In the words of Chittenden (2002), regulation and its impact on economic performance are major topics of public debate. Economies are argued to suffer disproportionately from regulation because of higher fixed compliance costs and their lower resilience to external shocks due to limited resources. Rules are essential for economic growth, social welfare and environmental protection. But rules can also be costly in both economic and social terms. Government may for example want to ensure public money is well-spent by allocating rent allowances only to those in need – but what if the system for determining eligibility is costlier than offering the allowance to everyone, or has the perverse effect of reducing the supply of housing? What business will be keen to invest and expand in a region or country if the paperwork involved eats up the first six months' profit?

The answer is not to give up on rules, but rather to develop a more efficient and less costly regulatory system. Regulatory management systems can help governments prepare better new rules and improve existing rules. Indeed improving regulatory management and regulatory reform are among the best ways that governments can promote economic development, investment and trade. But it requires a continuous process.

Few would argue that economic growth is the sole aim of society or, as conventionally measured: it is always an unmitigated blessing. Development can bring with it a degradation of the environment and the narrowing of ecological diversity. Certain industries, although not many, are natural monopolies or at best unstable oligopolies feared by the public as taking advantage of their privileged position. People often want the government to banish from new products and dangers in the workplace. All of these desires and the political pressures they create lie behind the humongous extension of governmental regulatory programs.

Many state regulations raise the costs of production and diminish factor productivity by internalizing negative externalities, constraining technological choice and requiring outputs (such as periodic reports and the provision of information to consumers) that producers would not normally furnish. Economic development, arguably, is thereby retarded. However, to the extent that regulations promote economic welfare, they can enhance a jurisdiction's attractiveness as a place in which to live, work, and vacation. Consequently workers (including executives) may be willing to sacrifice monetary compensation in order to work in a safe environment with insurance against (or the promise of compensation for) disability or injury incurred on the job, to live in communities relatively free of pollution or to have assurance that they will be provided with adequate health care and financial services if they pay for them.

Such amenities may also attract retirees and tourists with considerable purchasing power. In this manner, regulation can indirectly create compensating reductions in production costs and enhance a state's attractiveness to retail and service establishment in search of lucrative geographic markets.

These potential compensating effects complicate the task of evaluating the net impact of regulation on economic development. They imply endogeneity and simultaneity among variables, creating biases that are difficult to offset. How regulations are implemented in practice is at least as important as their requirements on paper. In general, controlling for enforcement behavior is more important in evaluating the impact of regulation than the impact of taxation. Yet, measuring regulatory stringency is generally more difficult than measuring the burden of taxation. Industries differ widely in the degree to which major state regulations are applicable. Disaggregation by industry, although limited by available data, is therefore important in evaluating the impact of regulations on economic development.

2. Theories of Regulation

The theory of economic regulation, according to Laffont and Tirole (2000), developed from the nineteenth century and the literature is now). The case for economic regulation is premised on the existence of significant market failure resulting from economies of scale and scope in production, from information imperfections in market transactions from the existence of incomplete markets and externalities and from resulting income and wealth distribution effects. For according to Stiglitz (1998), it has been suggested that market failures may be more pronounced and therefore the case for public regulation is stronger in developing countries. More recent theoretical contributions to the regulation literature have provided a model of regulation for network industries that recognizes the particular structural and institutional characteristics of developing countries and have highlighted the role of effective regulation in achieving equitable and sustainable expansion of infrastructure services in the poorer countries of the world.

However, regulation of markets may not result in a welfare improvement as compared as compared to the economic outcome under imperfect market conditions. In particular, information asymmetries can contribute to imperfect regulation. The regulator and the regulated can be expected to have different levels of information about such matters as costs, revenue and demand. The regulated agent holds the information that the regulator needs to regulate optimally and the regulator must establish rules and incentive mechanisms to coax this information from the private sector. Given that it is highly unlikely that the regulator will receive all of the information required to regulate optimally. Laffont (2005) is of the opinion that, to maximize social welfare, the results of regulation, terms of outputs and prices remain “second best” to those of a competitive market which centres attention on barriers to entry. Shapiro and Willig (1990) argue that state ownership provides more information to regulators than private ownership, so contracting should be less problematic when the state both owns and regulates. However, state ownership is associated with inadequate incentives to gather and use this information to maximize economic welfare. In other words, there are tends to be trade off between state ownership reducing the information asymmetries and hence transaction costs of regulation and the relative under state control and private ownership for agents to maximize economic efficiency.

Welfare-improving regulation in the words of Djankov et al., (2002), assumes that the regulatory authority’s actions are motivated by the public interest. This has been criticised by public choice theorists who argue that individuals are essentially self-interested in or out of the public arena and it is necessary,; therefore, to analyse the regulatory process as the product of relationship between different groups (Buchanan, 1972). This has been refined in the concept of “regulatory capture” which involves the regulatory process becoming biased in favour of particular interests. In the extreme case, the regulatory capture literature concludes that the regulation *always* leads to socially sub-optimally outcomes because of “inefficient bargaining between interest groups over potential utility rents” (Newbery, 1999:134; also, Laffont, 1999b). In the Chicago tradition of regulatory capture (Stigler, 1971; Peltzman, 1976), regulators are presumed to favour producer interest because of the concentration of regulatory benefits and diffusion of regulatory costs which enhances power of lobbying groups as rent seekers (Reagan, 1987).

Regulation is also subject to “political capture”: indeed, political capture may be a much greater threat than capture by producer groups outside of the political system. Where political capture occurs, the regulatory goals are distorted to pursue political ends; under political capture, regulation becomes a tool of self-interest within government or the ruling elite (Stiglitz, 1998). More generally, it is to be expected that both the process and outcomes of a regulatory regime will be determined by the specific institutional context of an economy as reflected in its formal and informal rules of economic transacting (North, 1990). By setting the “rules of the game”, institutions impact on economic development (World Bank, 2002; Rodrik et. at., 2004). Economic development is seen not simply as a matter of “institutional building” so as to reduce information imperfections, maximise economic incentives and reduce transaction costs. Included in this institution building are the laws and political and social rules and conventions that are the basis for successful market production and exchange. In particular, relevant modes of conduct in the context of the regulator state might include probity in public administration, independence of the courts, low corruption and cronyism, and traditions of civic responsibility. “Institution building” including building a “good” regulatory regime is one of the most difficult problems facing developing countries and the transition economies at the present time (Kirkpatrick and Parker, 2004).

Government Involvement in the Market

The government interferes or involves itself in the market in a variety of ways. The type of intervention may or may not diminish innovation, invention and improvements in productivity. The previous chapter stressed the difference between policies that affect the level of income and policies that affect the rate of change of income. Regulatory measures can produce both effects; that is, increased controls can shave the earnings available to a country or they can undermine the ability of the market to spawn innovations and new technology. For example, if officials mandate that all firms must provide free dental care, pay time-and-a-half for working more than 30 hours per week, or offer every employee six weeks of paid vacation, costs of doing business will rise and

workers' cash incomes will fall and they may of course prefer or not prefer the new benefits to the loss of pay. If employees actually value these fringe benefits over cash income, it would be surprising that firms would not have little impact on the rate of economic growth.

On the other hand, government intervention that undermines research and development, innovation or the invention of new products would curb economic growth and progress. For example, FDA rules that requires extensive testing for both safety and effectiveness of new pharmaceutical substances lead to long regulatory reviews and pare the profitability and economic feasibility of the development of new drugs; limits on the price of pharmaceutical products may also depress the returns from innovation. These rules would not only diminish current earnings but, by making research, more expensive would curtail investment in finding new ways to cure old diseases. In other words, these regulations would depress the rate of innovation, growth and ultimately progress.

One of the ways the state intervenes in the market is through the creation of a publicly owned enterprise. In this case, the operation is likely to be inefficient and costly to the economy but not destructive of a market system *per se*, nor are the government enterprise likely, in themselves to shave incentives for innovation unless the state grants monopoly status to its creation. Unfortunately, state officials usually bestow on the public company exclusive rights, thus undermining economic efficiency and progress.

The second and the most damaging interference stems from government controls over rates, prices, entry and other limits to the free market. These steps frequently lead to non-market clearing situations often with state mandated monopolies – sometimes governmental, sometimes private – or result in losses that require the taxpayer to provide subsidies. Bureaucratic fixing of prices and control of entry is probably much more damaging to the function of a market than simply setting up a public enterprise, provided that many taxpayer owned firm must compete in a free market with those that are private. Controls on what entrepreneurs can charge may limit investment and thereby diminish the introduction of new technologies necessary to generate growth.

A third form of intervention, not inherently bad, may simply raise costs: the regulation of what is produced or how it is produced. For example, a rule limiting the pounds of sulphur di oxide that can be emitted in production or setting certain safety or environmental standards for automobiles is not innately destructive of the market, it may raise prices; it may or may not yield benefits in excess of costs - that must be independently determined. Given that rules on how a product is to be manufactured or what its characteristics must include; however, the market can still flourish and competition can take place. These rules however, may restrict the possibilities for innovation in either production or the product, thus slowing the rate of change and ultimately progress.

If governments regulate extensively, imposing controls that diminish innovation or abridge the ability of the market to function, they will curtail growth rates. The experience of African socialist countries, of Burma and of all the communist and ex-communist countries demonstrates that excessive regulation; government ownership and government programs to control major portions of the economy have significant detrimental effects' on economic process and human well-being.

Even intervention far short of major socialistic programs can have significant negative effects on economic growth. Latin American policies with their emphasis on protectionism, government fostered businesses and monopolies, heavy regulation, state ownership of many enterprises – typically as monopolies – and redistributive programs designed to benefit the urban poor have resulted in slow growth and unstable governments. In *The Other Path*, Hernando de Soto describes the federal government in Peru, which has granted monopolies to certain favoured groups; establishing a new business lawfully is virtually hopeless, entering the transportation industries is impossible, opening a new market *legally* would take 17 years (144). What is called private enterprise resembles more the mercantilism of the 18th century, providing few of the benefits of the marketplace.

Deficiencies of Regulation

Traditional public utility regulation attempts to force a monopoly into mimicking the free market. A competitive market drives prices down to costs; technically, the competitive price is the charge that is just equal to the cost of producing the marginal unit; rates that exceed this level create economic inefficiencies. Ideally, regulators and government owned enterprises would not charge equal to the expense of producing the last piece; unfortunately, inevitably blunder.

Regulation and state ownership both produce inefficiencies although of different types. For various reasons, state control of private industry usually fails to protect the public. First, the government must decide on the appropriate price the regulated firm can charge; if the bureaucrats are the generous, they are not doing their job – preventing monopoly pricing. On the other hand, if they keep rates too low, the regulated entity may be unable to attract capital and will eventually be forced out of the industry, stranding the customers that the regulation was designed to protect. Consequently, regulators; typically government functionaries, must estimate the costs of service including capital costs and an “appropriate” rate of return to ensure that their ward can

survive. To estimate the right prices – that is competitive prices – is impossible and what is correct at one point in time will almost instantaneously be wrong as conditions change.

For most regulated utilities, a government commission attempts to value the company's investment and then calculate a "fair return" on its capital. To do this, state functionaries must quantify two financial variables – a very difficult if not impossible task. The bureaucrats must estimate the value of the capital base – just what to include is a long running dispute in utility literature – and they must provide for a "fair" return on the capital. If the rate is too high, the firm can increase its profits by over-investing more in their facilities than an unregulated firm would find optimally. Since there is no known rate of return that is correct and since too a figure will ultimately lead to bankruptcy, government officials will almost inevitably sanction a rate of return on invested capital above the cost of capital, thus leading to excessive investment.

Moreover, regulators secure all their information from the regulated. To calculate the rate base, the bureaucrats ask the *utility* to provide them with the data. In case of dispute - which may involve many hundreds of millions of even billions or even billions of dollars – the regulated entity employs the best accountants and lawyers that money can buy. On the other hand, the regulatory commission pays government wages for its lawyers and accountants. As a result, even a commission motivated to do best possible job has neither the information nor the personal. In addition, state regulatory commission typically have a large number of industries under their supervision but enjoy only limited budgets which must be spread over a large number of firms operating in quite diverse. To expect these functionaries to oversee their charges successfully is to believe in miracles.

Regulatory miracles appear to be less common than miraculous comings. Governments have extensively regulated what they view as "natural monopolies" or, outside of the United States, have created government enterprises to operate and provide these monopoly services. The results have almost always been poor. Studies of government regulation of electric power rates by George Stigler (1962) and the author (1970) show that such controls often reduce the prices utilities charge their most vulnerable customers – the homeowner – little if any.

3. Benefits from Regulation

Defenders of regulation usually assert that government intervention is necessary to correct a market failure. The industry may be a natural monopoly; firms may be spawning externalities such as toxic wastes, air pollution or contaminated water, unregulated activities may be endangering innocent third parties; companies may be failing to provide information or may be misleading the public about their products or activities. Supporters of government control have justified regulation on the basis of all of these externalities.

Government regulation affects much of the economy. The purpose of regulation is to create social or economic benefits that would not occur naturally in a pure market economy, or to avoid hidden costs that the market economy does not fully reflect. Benefits of regulation may be real as with the prevention of accident, injury or disease, or the reduction of damage from pollution. Benefits may be subjective as with policies that alter the distribution of wealth of income by means of price supports, subsidies or transfer payments.

The benefits of regulation are not without costs. Regulation of drugs may prevent the introduction of products with harmful side effects but it may also delay the release of lifesaving products. Inspection may prevent disease and safety feature on cars may prevent injury, but they also raise the price of food at and transportation. The benefits and the costs of regulation are generally hard to measure precisely. Whether a regulation provides a net benefit or a net cost is often difficult to determine. It is important to try however, in order to help policy makers and the public make wise decisions as to whether and how much to regulate.

The outcome of a regulatory system can be assessed against the yardsticks of effectiveness and efficiency. Effective regulation achieves the social welfare goals set down by the government for the regulatory authority. In Africa, the social and welfare objectives of regulation are likely to be not simply concerned with the pursuit of economic efficiency but wider goals to promote sustainable development and poverty reduction. Efficient regulation achieves the social welfare goals at minimum economic costs. The economic costs of regulation can take two broad forms: (1) the costs of directly administering the regulatory system which are internalised within government and reflected in the budget appropriations of the regulatory bodies; and (2) the compliance costs of regulation which are external to the regulatory agency and fall on consumers and producers in terms of the economic costs of conforming with the regulations and of avoiding and evading them.

Regulatory quality can also be assessed in terms of the criteria for good governance. Parker, (1999:224) argues that a well-functioning regulatory system is one that balances accountability, transparency and consistency. Accountability requires the regulatory agencies to be accountable for the consequences of their actions, to operate within their legal powers, and to observe the rules of due process when arriving at their decisions (e.g. to ensure that proper constitution occurs). Transparency relates to regulatory decisions being reached in a way that is revealed to the interested parties. The third process which provides regulatory legitimacy is consistency. Inconsistent regulatory decisions undermine public confidence in a regulatory system.

Inconsistency leads to uncertainty for investors, which raises the cost of capital and may seriously damage the willingness to invest. Since political intervention tends to undermine regulatory consistency, and politicians may be prone to alter the regulatory rules of the game for short term political advantage, consistency is a primary argument for some kind of “independent” regulator. This discussion suggests that the capacity of the state to provide strong regulatory institutions will be an important determinant of how well markets perform. An economy with a developed institutional capacity is more likely to be able to design and implement effective regulation which should contribute to improve economic growth. Weaknesses in institutional capacity to deliver ‘good’ regulation may be predicted to affect adversely economic development (World Bank, 2002).

Evidence on the quality of regulation in developing countries is limited through growing but where research has occurred, the evidence suggests that the results of state regulation have been disappointing. A recent study of 13 Asian countries found that 80% of regulators had no access to training and regulatory of ices were usually understaffed. The report concludes: “Asia’s governments rely too much on under-equipped and unsupported independent regulators to carry out tasks that are beyond their capabilities” (Jacobs, 2004:4). In Latin America, there is often a lack of political support for independent regulation and a lack of commitment to maintaining regulatory independence (Ugaz, 2003). In the context of Africa, it was found that “regulation is being examined as part of individual sector initiatives, but these efforts are uncoordinated and implementation is being left to follow privatization instead of being put in place concurrently” (Campbell-White and Bhatia, 1998:5). A similar pattern of regulatory structures are associated with acute failures in institution building and with a bureaucratic approach that curtails enterprise (Lanyi, 2000). South Africa’s proliferation of regulatory bodies is associated with a lack of clarity about roles and responsibilities and with the adoption of policy-making roles independent of government (Schwella, 2002:3). In Malawi, the electricity industry regulator remains closely connected to the state electricity industry compromising any notion of real regulatory independence and encouraging capture. In Sri Lanka, the policies governing the regulatory process are judged to have been *ad hoc* and based on short-term political interests with differences apparent at each stage of the process (Knight-John, 2002). Experiences in the transitional economies also demonstrate much variability in the performance on the newly established regulatory institutions (Cave and Stern, 1998). In recognition that all is not well, the World Bank (2001: v) has stressed the importance of “improving regulatory regimes and building institutions and capacity effectively to supervise the private sector”. The Asian Development Bank (2000:18) has also emphasized the need for improved regulation.

Several papers have identified the casual effects of better governance on higher per capital incomes in the long run using regressions with instrumental variables on a cross-section of countries (Barro, 1997; Hall and Jones, 1999; Kauffman and Kraay, 2002). The casual chain between governance and economic outcome has also been examined. Some studies find that the quality of governance and institutions is important in examining rates of investment, suggesting that one way in which better governance can improve economic performance is by improving the climate for capital creation (World Bank, 2003; Kirkpatrick, Parker and Zhang, forthcoming.). Olson et al. (1998) find that productivity growth is higher in countries with better institutions and quality of governance. Kauffman and Kraay (2002) reinforce these findings relating the quality of governance to economic outcomes using a data set covering 175 countries for the period 2000-01.

4. The Coast of Regulation

No one knows exactly the total burden of all regulations but it is certainly onerous. Philip Abelson in *Science* (1993a) reports that in 1991, the toll on the United States’ economy from all controls amounted to \$542 billion. He also asserts that outlays for environmental cleanup and prevention, which cost \$115 billion in 1991, would balloon under current laws more than 50 percent in real dollars by the end of the century. In 1990, the Republican members of the Joint Economic Committee put the tax from government regulation (1992) at a minimum of \$461 billion. Economist Thomas D. Hopkins of the University of Rochester estimates (1992:5) that due to federal regulations American customers spend rough \$400 billion extra on higher priced items “over and above those costs of government that show in the budget”. He calculates that this sets back the average household about \$4,000 per year. Louis Richman quotes (1992) Paul Portney of Resources for the Future in *Fortune* as predicting that environmental regulation by itself will absorb 2.8 percent of the GDP by the year 2000. Germany, he judges (95) despite its strong commitment to a clean world will be spending only 1.6 to 1.8 percent of its national income.

These expenditures do bring benefits but they are much less than the costs. Even when the gains eclipse the burden tighter controls generally lead to much higher expenses which eventually exceed, often vastly, any improvements in welfare. For virtually all pollution abatement programs, attempting to eliminate more and more of an offending substances grows progressively more expensive. Totally purity is typical unachievable and endeavouring to approach perfection quickly becomes exorbitant.

As mentioned above, government controls impose a tax on the economy, and decontrol is equivalent to lifting a levy. After the United States began to deregulate its transportation and communications system in the

late 1970s and early 1980s, economic growth picked up and productivity improved. Logistician Robert Delaney (1988) has found huge savings – in the tens of billions of dollars – in inventory and distribution costs, that is, logistics expenses, stemming from this deregulation. Virtually all studies have shown that consumers have gained greatly from deregulation (*Moore et al.* 1986b; *Vanston et al.* 1990).

Regulation produces a constraint that firms must factor into their decisions. Sometimes, the rule prevents them from charging more than a certain amount or less than a minimum; sometimes, it requires them to offer specific services or provide certain groups with special benefits in other cases, the state mandates safety standards, labour rules, work conditions or even environmental controls. A rule obliging the installation of certain safety equipment or bestowing specific rights on workers imposes only an additional constraint on the requirements on the market. Thus, if marketplace dictates that employees be paid more than \$6.00 per hour but the government adds a new requirement that the employer give the worker parental leave, sick leave or any one of a potential unlimited number of entitlements, the company will continue to seek the highest possible profits consistent with that rule. Such legislation will give rise to a number of distributional effects – some unfavourable to a certain employees, some favourable but not necessarily to those ostensibly aided. If for example, the employees who are covered by the new rules become, as a consequence, more costly to their company, the firm will likely reduce its hiring of such workers' and perhaps subsidize others less affected. For example, congress recently enacted legislation mandating leave for parents with newborn children. Since women are most likely to request time-off to care for infants, employers will prefer to hire males, especially if they find financing such leaves burdensome. Thus, those specifically favoured by the regulation may suffer more unemployment or be forced into occupations which pay less.

In any case, the burden of new regulations will be borne in part by the employees covered and in part by consumers of goods and services of companies affected by the legislation. Ultimately, as mentioned above, government rule represent a tax on the covered industries, as such, state controls will lower incomes of the general public who will ultimately pay the tax through higher prices, while *perhaps* providing some benefits to certain employees or employers. There may be cases in which the rules do bring benefits to the population as a whole or to certain groups greater than costs imposed, but few studies have found such positive gains.

To summarize, regulation normally reduces real incomes. Once real earnings have fallen to a new lower level reflecting the government mandate, there may be no appreciable further effect on economic growth. Unless government rules limit improvements in technology or innovations that increase efficiency, the rate of advancement in technology should be unaffected. Many forms of state control, therefore, affect the level of income not its rate of increase. On the other hand, as discussed above, the bureaucracy with the tacit support of existing firms frequently employs regulation to discourage new competition and technologies that threaten established companies and industries. If the government attempts to protect its wards in this manner, it can retard economic growth.

Economists frequently distinguish between economic regulation – the control over prices, profits and entry – and social regulation – the supervision of safety, working conditions and environmental contamination. Economic regulation, that is oversight of rates and economic performance can curtail growth by deterring new competitors; social regulation may or may not be an impediment to economic progress. Those rules that constrain innovation prevent legislation that confers new rights or workers, as discussed above, may trim the wages of these same employees but after the period of adjustment may not handicap development.

Economic and social regulation, state-ownership of major industries, and large government programs to redistribute income have apparently had limited effects on growth. Sweden, Holland, Belgium and West Germany have all flourished despite extensive government involvement in the economy. Sweden, however, has seen growth slow in the last decade or two. On the other hand, Switzerland with limited government intervention has also suffered from slow growth.

A study by Alwyn Young (1992) demonstrates that although Singapore has grown as fast as Hong Kong. Singapore's more interventionist policies have reduced the living standard of its people and yielded less efficient investment. The importation of new technology has generated virtually all of Hong Kong's advancement while none of the growth of Singapore can be attributed to improvements in technology. The rapid advancement of the latter city-state stems from a government-fostered extraordinarily large investment boom. In 1984, the amount being plowed into new plant and equipment reached 43 percent of GDP (14). By subsidizing investment, the city administration reduced the return on new capital spending to zero. In other words, even among some of the most successful economies in the world, government intervention has weakened business.

To sum up, regulation saves the consumer little but thwarts innovation and hinders new modes of serving the economy, thus hobbling progress. For example, ICC oversight of the surface transportation industries probably retarded intermodal technologies which have flourished since these industries were partly freed in the late 1970s. Rather than regulation, the public might have been better off suffering temporarily from a private monopoly – any excess profits garnered by a natural monopoly would stimulate others to find ways to compete. Alcoa and U.S. Steel were both at one time unregulated monopolies; over time they faced increasing competition

and now have no real market power. On the other hand, AT&T, a regulated firm, maintained a monopoly position in long distance service from almost the beginning of telephone communications until the early 1980s when, as a result of an antitrust case. Ma Bell agreed to be divided into regional operating companies and a separate long distance corporation, subject to competition for the first time, the result was a sharp fall in long distance rates and a proliferation of new communications technologies.

Environmental regulation, which is relatively new, may bring benefits greater than its costs or so its supporters argue; but in light of the poor performance of regulation in other areas, the public has reason to be sceptical. In a number of cases, government efforts to protect the environment or to safeguard people from toxics have resulted in little good and much harm. In 1982, for example, the federal government forced the entire population of Times Beach Missouri to sell their homes and businesses to the government and move out; the Reagan Administration imposed this wholesale condemnation because several years earlier, a contractor had mixed dioxin with asphalt in paving the roads; officials believed that dioxin in any amount was highly toxic. Later, the federal bureaucrat who had recommended abandoning Times Beach admitted that, in the absence of any evidence that dioxin in low doses is harmful, he would not now recommend that any similar be abandoned. The damage to the men, women and children of that small town had been done.

5. CONCLUSIONS

The provision of a regulatory regime that promotes rather than constrains economic growth is an important part of good governance. The ability of the state to provide effective regulatory institutions can be expected to be a determinant of how well markets and the economy perform. The impact of regulatory institutions on economic growth will depend on both the *efficiency* of the regulatory policies and instruments that are used and the *quality* of the governance processes that are practiced by the regulatory authorities, as discussed in the early part of the paper.

As we highlighted earlier, the proxies we use for regulatory governance are correlated with a number of other institutional proxies. One could argue, therefore, that what we have established could equally hold for the link between institutional capacity in general and economic performance. However, the literature reviewed earlier in the paper is consistent with institutional capacity playing a strong and complementary role to regulatory governance and the principal component analysis undertaken is supportive of this view. Nevertheless, the ability to model separately institutions in general and regulatory institutions or governance in particular remains problematic because of their potential complementarities. Hence, our results are perhaps most safely interpreted as demonstrating the importance of regulatory quality for economic growth in the context of wider institutional capacity building.

Also, we acknowledge that in our analysis, there is no control for the different regulated industrial sectors including privatised industries. Hence, the results need to be interpreted with care because of the heterogeneity of the sectors covered. The possibility that regulatory quality inputs differently across different industrial sectors cannot be ruled out. Unfortunately, data limitations prevented us from pursuing this issue. Finally, we acknowledge that the direction of causation between economic growth and regulatory quality deserves further investigation. Nevertheless, despite these caveats, we believe that there are good a priori grounds for assuming that better regulation leads to more rapid economic growth and that our empirical results are consistent with the view that “good” regulation is associated with higher economic growth in lower-income economies.

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