Policy Brief

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Efficiency and Effectiveness of Competition and Regulation

In the past decade, there has been frenetic activity across the world with countries adopting new competition regimes and/or reviewing the existing ones. About 120 countries now have a competition regime in place. Similar activity in regulatory regimes has been even more vigorous. This policy brief examines various studies and models that have emerged in an attempt to gauge the efficiency and effectiveness of these regimes.

Introduction

Effectiveness of competition and regulation has been analysed from various perspectives in recent times. One evaluation study of competition policies takes into consideration the relevance, effectiveness and efficacy perspective while another assesses technical assistance *vis-à-vis* improved effectiveness. In regulation, one perspective views the role of regulatory agencies on the basis of relative advantages of regulation by contract and regulation by agency and another considers the same from the angle of costs with tariffs, renegotiations and effects on productivity, quality of services, coverage and prices.

Effectiveness of Competition

Competition laws and a policy focus on domestic competition have spread across many countries. Developments within individual countries were sometimes influenced by developments within the European Union and by policy assistance from organisations such as the World Bank. Due to this spread in competition laws and policies, there is an increasing need for their evaluation. A study argues that an evaluation could have two levels that focus on an intermediate outcome and a final outcome.

The intermediate outcome is defined as 'competition policy implementation and enforcement effectiveness'. Implementation of competition policies is achieved through a mechanism that enforces extant competition laws and regulations by use of a resource, such as the budget.

The success of the intermediate outcome is measured by the level of domestic competition index assigned to each country by the World Economic Forum (WEF) through the WEF index. The links from legal infrastructure (competition laws) to implementation and from use of resources (competition agency's budget) to implementation are evaluated. A positive link is interpreted as an effective intermediate outcome.

The final outcome is defined as 'national competitiveness to attract foreign direct investment (FDI)'. The success of the outcome is measured by the ratio of the FDI flows to national income. The link from a country's effectiveness to achieve the intermediate outcome to the level of the FDI inflow (as a ratio of the national income) is evaluated. A positive link is interpreted as an efficacious final outcome.

Results of this study have important policy implications. They suggest that merely increasing the size of the competition agency's budget cannot bridge the gaps between the developed and developing countries. Reorganising the spending priorities of the competition agency as well as developing extra-agency initiatives, e.g., involving civil society organisations, enabling private parties to initiate lawsuits under the competition laws and facilitating collection of damages from violators should be considered.

A separate study looks at the impact of technical assistance (TA) on competition agencies' effectiveness. The study used a dataset of responses from 38 competition agencies that received TA during the period 1996-2003. The mutual relationship between TA proficiency and its impact on overall performance of the recipient competition agency has been assessed.

TA services refer to all assistance for capacity building in the competition agencies of countries. With many countries introducing competition agencies in the last couple of decades following a shift to more open economic approaches, their competition agencies are faced with a steep and difficult learning curve requiring simultaneous determination of organisational design and

budgets and hiring of staff. In many cases the skill requirements are not met by the existing staff in terms of being able to interpret and implement competition laws, resolve disputes, make quick decisions and collate/analyse perceptions of stakeholders. In such cases training programmes assume great importance. TA can be used for many purposes:

- to resolve regulatory design issues;
- to deal with international business and legal practices;
- to provide educational and publication related assistance; and
- to assist the staff in making effective decisions about competition.

A large number of hypotheses emerge from the study, which uses econometric techniques on data generated by a perception survey.

Effectiveness of Regulation

Regulation is defined as the "rules enforced by a government agency to control economic activity". Economic regulation consists of rules governing price, output and industry structure. It is used in cases where the free working of market forces leads to sub-optimal outcomes due to the presence of natural monopolies (industries where the production of industry output by a single firm is more cost effective than that by multiple firms), information asymmetries between consumers and producers or the imposition of costs by producers on others without any penalties.

A study analyses the relative advantages of regulation by contract and regulation by agency by considering hybrid forms of regulation and the roles of regulatory agencies in these. Typically in the water sector, private participation is structured as a concession or lease contract rather than a full divestiture. Autonomous regulatory agencies are rare for water services as compared with the telecommunications or electricity sectors. Agencies or institutions, such as contract monitoring agencies, regulatory bodies or specialised courts, generally support water service contracts. These cases can be characterised as hybrid regulatory systems.

The study shows that if both the government and the firm have long time horizons (a time horizon is defined as the span of time, the events or returns over which are considered relevant for decision making), then the parties will be able to achieve a cooperative equilibrium in which both comply with the contract. However, where the parties have short-term horizons, both would have incentives to renege on and renegotiate the contract.

The central role of time horizons occurs because of the time profile of costs and benefits in water service contracts. In the early years of such a contract, the government faces short-term political costs as raising tariffs would be unpopular, while the firm must invest heavily in order to earn positive returns in later years. The tendency towards uncooperative behaviour in the short-term

Box 1: Findings on Effectiveness of Technical Assistance Programmes

The effectiveness of TA programmes improves substantially when both the donor and recipient are sufficiently involved in the setup process. The relative influence for both the donor and the recipient on the design of individual programmes has a substantial impact on their reported efficiency. Presence of long-term advisers working within an agency, as well as certain country characteristics such as per-capita wealth or overall market freedom, leads to improved TA. Conversely, improving the quality of assistance is shown to explain overall improved agency effectiveness.

TA characteristics, recipient agency variables, and country-level variables all determine the effectiveness of TA and the recipient agency. The relative success of these institutions derives from a complex mix of human, economic, and political forces. Future plans for TA should not focus too heavily on simple "recipes for success", but rather consider the complex situation in each country that recognises unique issues and challenges.

TA effectiveness was a significant indicator of overall agency effectiveness. Conversely, more effective agencies, identified as those recognised for "ensuring the effective implementation of antitrust policy", generally found TA less effective. The results seem to suggest that TA is perceived as performing best in working with agencies that need help.

TA should focus on what matters most to the agency – its ability to effectively intervene in situations of anticompetitive conduct and enforce competition policy. TA, as it is currently envisioned, undertakes many other activities (e.g. academic papers and seminars) that prove useful but should not supplant an approach oriented towards outputs.

TA appears to work best when the recipient agency is in an environment where change is perhaps needed and/or desired but, for some reason, is being stifled. Given budget constraints by donor agencies, results suggest that TA could be targeted to situations where success is more likely.

The Malaysian political system is characterised by institutional and political stability as the same party has been in power since independence. The State of *Johor,* which is both affluent and characterised by politically influential business. Political stability ensures a long time horizon. Though quality and coverage of the service provided by the water utility was high its financial health became plagued by its heavy debt to the Federal Government in the 90s. The State Government decided to shift the debt burden by awarding a concession contract in this sector.

Before the award of the contract, the water utility was corporatised and a sectoral regulator, BAKAJ, was created. This was a monitoring body with no tariff setting or investment determining powers. The assignment of the monitoring function to a separate body made the threat of penalties for contract infringement appear more real to all concerned parties and encouraged adherence to the regulatory contract. Other powers still remained in the hands of the Economic Planning Unit of the State Government.

In general, the private firm and the State Government have had amicable relations based on cooperation. The Government has not reneged on the contract and has granted periodic tariff increases. The *Johor* contract demonstrates that a cooperative solution can be attained under a supportive institutional framework which itself is a result of political stability and associated time horizons.

The Indonesian case is in stark contrast to the Malaysian case and was characterised by extreme political instability with changes in the nature of Government and four different Presidents between 1998 and 2001. Given the associated short time horizon of its politicians, the Government of Indonesia did not adhere to its contract with the private water utility in Jakarta when there was an economic crisis between 1998 and 2001. The required tariff increases were not approved. The firms, therefore, sought the creation of new Regulatory Body (RB), which was approved, but with strictly circumscribed powers. However, even with its narrow regulatory powers, the RB was able to initiate dialogue and renegotiation as well as dispute resolution. By a Government decree in 2005 it was given the powers of tariff setting.

The Indonesian example shows that active intervention by a regulator can sustain cooperation even when the relevant parties have short time horizons.

can be countered by strong third-party enforcement or by strong short term reputational effects.

This highlights the critical difference between judicial institutions, which support contract enforcement by contracting parties themselves, and regulatory institutions, that allow for third party contract monitoring and enforcement. This is due to the inherently voluntary nature of contracting. The quality of the judiciary cannot itself deliver cooperative behaviour by the parties. In contrast, a regulator with an obligation to monitor and enforce the contract can ensure compliance if it has adequate access to information, to demonstrate non-compliance and can impose sufficiently high penalties on non-cooperative behaviour to outweigh short term costs of compliance.

Another model has developed in a study that develops a measure of the overall quality of the regulatory framework and empirically evaluates the impact of such a quality on the profitability of firms with the hypothesis that better the quality of regulation, the closer is likely to be the correspondence between the firm's rate of return and the firm's cost of capital. The conclusion of this analysis is that regulation matters in aligning cost of capital and rate of return. Thus, for regulation to be effective, one needs the entire package of regulatory characteristics. If some key ingredients are missing, the effectiveness of regulation is highly diminished.

The model also evaluates the impact of regulation on the incidence of renegotiation by estimating on two likely situations – one where the renegotiation is operator-led and the other when it is government-led. The results show that contract characteristics, political and economic variables and regulation all matter in explaining the frequency of renegotiations. The analysis also shows that price cap regulation increases the probability of renegotiation but the existence of a regulatory agency and its autonomy decreases such a possibility.

Finally the model attempts to correlate whether and to what extent regulation could explain the heterogeneity of performance of utility firms on four outcomes, namely, coverage and output, productivity, quality of service and prices by studying the Latin American region. The results suggest that regulatory and contract characteristic affects each outcome differently and that some characteristics have bigger impacts.

Conclusion

Competition and regulatory agencies face several obstacles while implementing their mandate. These obstacles have varying degree of influence on the functioning of the concerned agencies and affect their efficiency and effectiveness. Under the circumstances, there is a need to analyse enforcement practices of jurisdictions in the developing world to assess how they cope with such obstacles and to assess their effectiveness.

Antitrust effectiveness is an important issue in developed and developing countries. Effective implementation is an intermediate policy outcome that is achieved through the use of an enforcement mechanism. Existence of a secular effectiveness gap between groups of countries cannot be explained by a combination of variables such as antitrust agency budget and staff size. Differences in antitrust implementation effectiveness between groups of countries can have implications for policy priorities both within and across these countries. The success of the final outcome is measured by the ratio of the FDI inflows to national income.

TA is another means by which institutions become effective. Many nations have augmented their development of competition agencies with TA support. Determining how best to design TA programmes to interact with nascent and financially constrained competition agencies is a difficult and complex matter. One major finding is that the effectiveness of TA programmes improves substantially when both the donor and recipient are sufficiently involved in the setup process. This will improve the efficiency of TA and ultimately the efficiency of emerging competition agencies.

Many regulatory systems fall between regulation by contract and regulation by agency. Developing countries have often experimented with hybrid mixes when liberalising utility sectors. There is evidence for direct political intervention in many cases, as well as more subtle forms of regulatory and political capture.

The case studies reveal that regulatory agencies in hybrid structures play multiple roles that promote cooperation between governments and firms. Regulators may still be able to balance the interests of consumers and investors if there are adequate institutions in place external to the contract that limit arbitrary action by government and limit the influence of private sector actors on administrative processes. In particular, national efforts to increase transparency and accountability may be more important than sector level policies and laws.