Developments in Best Practice Regulation: 
Process vs. Performance

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Introduction

The purpose of this paper is to provide an overview of developments in best practice regulation. Since the Public Utility Research Center, in collaboration with the World Bank, has put on six International Training Programs on Utility Regulation and Strategy over the past three years, we have worked on this topic on an intensive and regular basis. Over 500 regulators and managers from 87 countries have come to Florida to participate in the two-week course. We have learned a great deal about the principles of regulation and about the regulatory process. I wish I could report that we have the definitive classification scheme that allows us to rank all regulatory commissions on the basis of well-defined (and quantifiable) criteria. Unfortunately, I do not have the recipe for all to follow. In fact, there is no “ideal” commission, since organizational design depends on the institutional context. Nevertheless, I will propose a criterion from an economist’s perspective.

Recently, Australia’s Utility Regulators Forum had a Discussion Paper of “Best Practice Utility Regulation” prepared as part of a program to promote the exchange of ideas regarding regulatory activities. Nine best practice principles were identified:

1. Communication (information to stakeholders on a timely and accessible basis)
2. Consultation (participation of stakeholders in meetings)
3. Consistency (across market participants and over time)
4. Predictability (a reputation that facilitates planning by suppliers and customers)
5. Flexibility (by using appropriate instruments in response to changing conditions)
6. Independence (autonomy—free from undue political influence)
7. Effectiveness and Efficiency (cost-effectiveness emphasized in data collection and policies)
8. Accountability (clearly defined processes and rationales for decisions, with appeals)
9. Transparency (openness of the process)

These principles are then embodied in best practice processes, as problems are identified and addressed in a systematic manner. Finally, the third component emphasized in the Discussion
Paper relates to best practice organization: the role, resources, and structure of the agency. The staff expertise for making decisions and clarity of responsibilities (within and among government entities) were important aspects of this third component.

The document represents a good overview of the institutional design and regulatory process issues that must be addressed when establishing or evaluating a regulatory agency. However, it needs to be extended to include sector performance as the ultimate indicator of regulatory performance. If good regulation only involves filling out a checklist of agency qualities, then organizations with law-abiding well-intentioned people ought to be able to score high on indicators reflecting each of the nine principles. In addition, the regulatory process can reflect those principles. Yet if firms in the sector are not performing in a manner that matches standards set by similar firms in other countries, then how can that regulation be “best practice”? Somehow, regulatory outcomes must be factored into the evaluation, and both relative and absolute levels of sector performance are outcomes of interest to customers and investors. If consumers are being denied valued new services available to those in other countries, then the principles and processes will not be adequate indicators of performance.

Fortunately, the conflict is more apparent than real. These regulatory inputs (principles, processes, and organization) will tend to promote investments and managerial activities that enhance actual industry performance. However, if the substance of regulatory strategies and the implementation of associated policies are inconsistent with strong sector performance, then the benchmarking exercise needs to recognize this policy failure. For simplicity, let performance consist of five elements: (1) productivity advance (reflecting cost containment and adoption of new technologies); (2) new service introductions; (3) returns to investors commensurate with the risks they bear; (4) prices that reflect minimum incremental costs; and (5) expansion of basic services to particular customer groups. Countries with high performance in energy, water, and telecommunications sectors will generally also have good regulatory performance—as defined in the Regulators Forum document or the NERA study by Stem and Holder. The associated agencies will have met the checklist of principles. In addition, they will tend to have processes that promote credibility with investors and legitimacy with consumers. Finally, successful agencies have organizational designs that enhance efficiency in the sector and the economy as a whole.

Thus, a key indicator of regulatory performance is sector performance. The number of studies, cases decided, and rules promulgated are regulatory inputs. However, the fundamental regulatory output is industry performance. Benchmarking looks at both inputs and outputs. Of course, sector performance is also dependent on general economic conditions and institutional features of the economy (including an independent judiciary and political restraint). Nevertheless, if the study of “best practice” focuses on principles and procedures rather than market outcomes, then we will have a very limited perspective on what really matters.

(2) Autonomy; and (3) Accountability. They identify three areas related to regulatory processes (informal accountability): (4) Participation; (5) Transparency; and (6) Predictability. The six criteria are used to rate agencies in six Asian nations.
Economics of Politics—“Who Matters, What Matters?”

The emphasis on industry performance is not meant to diminish the importance of principles and process. Clearly, both are necessary—but not sufficient—if regulation is to be judged “best practice.” Procedures matter because of the role played by a regulatory agency in mediating among the interests of various stakeholder groups. The “classical” characterization of “independent” regulation has the agency in the middle of a triangle, balancing the interests of government, suppliers, and customers. Recognizing that institutional change requires legal mandates, the Government is often placed at the top vertex of the triangle. Government could be identified more broadly as politicians and elected officials. Or it might be defined more narrowly as a “Ministry.” However, those out of power could be in power in the future, so the agency is also mediating the interests of individuals whose time horizons extend to the next general election and others who influence public policy only indirectly. Furthermore, in federal systems, the agency might have primary responsibility for one jurisdiction, so that the interests of other agencies must be taken into account. The simple term “Government” in the balancing act begins to resemble a much more complex set of political forces.

The triangle’s vertex labeled “Suppliers” is complex for a number of reasons. So long as the entity is no longer a vertically integrated firm, an entire production chain must be considered. Market design issues are at the forefront of regulatory challenges. Incumbent firms (privately or publicly owned), recent entrants, and potential entrants all have interests in the “rules of the game” established by the agency. Access regimes, types of incentive systems (price cap vs. rate of return), and review processes all affect the cash flows for these market participants. Behind these firms are sets of equity owners, debt-holders, and managers—all of whom can have different interests regarding risks they are willing to experience and information disclosure rules adopted by the agency.

No less complicated is the interest group identified by “Customers.” The number of customer categories is endless: industrial, commercial or residential; urban or rural (high cost areas); large or small demanders; high income or low income; served and unserved communities; technologically sophisticated and unsophisticated; today’s customers versus all these groups five years from now. The balancing act within a category begins to look even more problematic than between the three archetypal groups.

So the classical characterization of the regulator as “merely” balancing the interests of three groups resembles a troop of jugglers with thirty different objects flying through the air at various speeds. This observation explains why I like academia: it is far easier to be an outside observer of such an institution. As the number of policy objectives increase, the number of potential suppliers expands, and diverse needs of customers become recognized, the task of regulation becomes more complicated. The lesson for regulation is that a “light-handed” approach is best: forbearance where available (depending on the law), competition where feasible (depending on production technologies and market size), and all-party settlements (alternative dispute resolution) where possible.
So in principle, the agency balances all these interests in a way that promotes legitimacy to customers, credibility for investors and efficiency for the general economy—all the while recognizing that the three objectives involve many sub-components that complicate the regulatory process. When the impersonal market can be used to create and allocate value, the advantage to leaving the outcomes up to market forces is that the rent-seeking activity of the various market participants is channeled away from influencing the regulatory process.

In the case of many public policies, the benefits are highly concentrated, and the costs dispersed over a number of groups. For groups with high per capita potential benefits, political lobbying activity will be intense. This pattern means that some public intervention is likely to result in the aggregate costs being greater than the benefits (for example, the protection of special interests).

The next two sections focus on two key characteristics of regulation that can partially counter the likelihood of capture: transparency/participation and consultative processes that bring all the parties to the table. Then some fundamental economic concepts are presented that underscore my reasons for preferring to identify “best practice regulation” in terms of indices of industry performance rather than indicators of regulatory procedures. I would elevate substance over form.

**Transparency and Participation**

Transparency implies openness to the views of different stakeholder groups. Participation by stakeholders is one way regulators can be held accountable for their actions. How are agencies rewarded or punished? First, budgets can be expanded or cut, based on the perceived performance of the agency (and the sectors it regulates). Second, recognition can be given to key personnel who have a significant impact on agency policy implementation and on sector performance. Third, legislative and executive oversight can serve as a vehicle for monitoring agency activities. In addition, McCubins and Schwartz (1984) emphasize the role of interest groups as providing additional information to politicians regarding agency activities: such groups trigger “fire alarms” if the bureaucracy strays from its legislative mandate.

In the case of regulated industries, incumbent suppliers can obtain information rents because they have more information on demand patterns and cost structures. Other interest groups, including potential entrants, have an interest in bringing out some of that information. Policy-makers will find it helpful to have administrative processes that facilitate the development of more comprehensive information. Thus, communication and consultation are important principles for effective regulation.

Of course, various stakeholders (with interests that diverge from the incumbent) will tend to present biased information. However, policy makers have the advantage of eliciting a diverse set of perspectives in the context of open proceedings. Furthermore, factual information can be challenged, so the various participants will tend to build sound (as opposed to “biased” cases) for
their positions. Thus, administrative procedures can structure participation so as to produce policies based on more comprehensive information.

Not that unless formal and informal processes are in alignment, transparency can be threatened. For example, in the Argentina natural gas sector, the law requires the regulatory agency, Enargas, to document the sources of cost-savings implicit in the X-factor applied to distribution companies in a price control review. This requirement has been interpreted as requiring the agency to develop cost-containment programs that the company could adopt to achieve these savings. In the recent price review, the agency also examined total factor productivity numbers to gauge the feasibility of plans. The key point here is that the formal process (required by law) might diverge from the actual process used to estimate X.

It is surely problematic to have regulators identifying specific plans for cost containment (an improve learner reading program, just-in-time inventory initiatives, etc.) So in practice, the creation of recommended projects becomes a formal mechanism for ratifying a more realistic informal process for quantifying X. It seems that such a “shadow” process increases regulatory discretion and reduces transparency. However, if the legal framework makes such an approach necessary, this “second best” approach is better than the alternative—in this case, micro-management.

Consultation and Alternative Dispute Resolution

Stern and Holder identify participation as one of their six criteria for sound regulation. They recognize that both communication and consultation are necessary if stakeholders are to be informed of rules and allowed to contribute to regulatory discussions. Broad policy will have been established in legislation, but the agency will still have to interpret and apply the law in the context of the facts. Identifying that “reality” becomes a task for market participants. As the number (and diversity) of market participants expands, the use of the traditional adversarial hearing process in the U.S. is being supplemented (if not replaced) by alternative dispute resolution (ADR) procedures.

It is said that “Settlements make winners—Hearings make losers.” Nevertheless, the dispute resolution process matters. Three approaches from Canada illustrate the strengths and limitations of various approaches to ADR (Grant, 1999). First, consider the Ontario Energy Board. Utilities provide a detailed application to the Board to initiate negotiations. Although Board staff members attend discussions, they are to provide general information—not take positions in the negotiations. Once a settlement is reached, the Board reviews the agreements on an issue-by-issue basis, making changes. The rationale for such intervention is that the parties might not reach an agreement in the public interest. However, individual issue review reduces the likelihood that stakeholders will make trade-offs (compromises) that yield win-win outcomes, since participants realize that the Board can overturn portions of the agreement. The result is that few actual settlements are achieved.
The case of the National Energy Board is quite different. No application is placed before the Board. Staff members do not participate in the meetings (so they are not in much of a position to evaluate the final settlement). Thus, the Board either approves or rejects the settlement document. While numerous settlements between shippers and pipelines have emerged from these negotiations (involving pricing flexibility and mutually beneficial incentives), the system is not at all transparent to the general public.

Finally, consider the British Columbia Utilities Commission. The utility submits a full application, outlining the issues to be resolved. Workshops and information requests promote transparency, with commission staff actively participating in the negotiations. Nearly 100% of the settlement processes have been successful (and approved by the Commission)—reducing the cost of regulation and speeding up what can be a cumbersome process. Grant (1999) maintains that the B.C. system has stimulated utilities to work closely with customers, yielding improved performance for suppliers and customers. On the surface, the last system seems to be closer to “best practice,” but additional analysis would be needed for a definitive conclusion. In particular, do agency staff operate in a heavy-handed manner in this attempt at “light-handed” regulation?

**Beyond Process to Substance: Concepts for Promoting Good Performance**

My emphasis on industry performance is based on a view that ultimately regulation is serving as a mediator between consumers and suppliers. A case can be made that economic efficiency ought to be given at least as much weight as procedural rules when evaluating a commission. No doubt, regulation is also about “fairness” and public acceptability. However, unless weight is given to long-term market performance, we will focus on individual trees and not see the forest.

Regulation has a significant impact on the operation of markets. Regulators have a number of instruments available to influence markets. The instruments can be directed at three main targets: structure of the industry, behavior of firms, and market outcomes (or performance). Market design is one of those forest topics that has a significant impact on ultimate market performance. Market structure is affected by regulations creating entry barriers and limiting product offerings. A second set of rules constrain corporate behavior (price levels and rate structures, promotional activity, service quality, input choices, and environmental rules—to list a few). Other regulatory instruments directly impact the performance of firms—as in sharing rules (if returns exceed some specified limit). Depending on the instruments used by regulators, value is created, destroyed, and/or allocated among various stakeholder groups.
To understand how regulation affects managerial decision-making, it is helpful to survey some of the concepts and principles that capture key features of the regulatory environment:

(1) **Asymmetric information** is a technical term (jargon) that attempts to capture the different knowledge bases of managers and regulators. Managers have much more information about production possibilities, demand patterns, and the impacts of technological changes than regulators. In some ways the point is quite obvious, but its implications for regulatory policy are profound. Admitting ignorance is not easy. Yet, if knowledge is power, surely ignorance represents weakness. If agency staff have a limited, incorrect, or distorted view of cost-containment opportunities and customer valuations for various service qualities, then regulatory mandates that presume otherwise are likely to yield sub-optimal performance. This point is not intended to imply that executives and managers always have better information or make great decisions. The principle of information asymmetry merely underscores the need to provide appropriate incentives so managers utilize their information in ways that ultimately benefit consumers. Simultaneously, the system should provide the opportunity to maintain the financial integrity of the firm.

(2) **"Incentive Regulation"** involves agency policies that are designed to induce managers to apply their information in ways that improve cost containment activities and promote new service introductions. Opportunities for capturing some of the added value (often labeled “rents”) created though managerial effort and risk-taking will tend to promote good performance in the sector. Cost of service, disallowances, price caps, benchmarking, and hybrid schemes all provide incentives of one form or another. A key point is that when firms can gain more via the hearing room (or legislature) than through operational effectiveness, they will devote resources to influencing regulatory rulings rather than value-creation.

(3) **Optimal incentive plans** represent one method to force the firm to reveal its capabilities. Given information asymmetries, the firm will be better off than if regulators had complete information. But performance is improved under plans that give firms some flexibility in selecting targets. A firm that agrees to attempt to meet very high performance goals is rewarded with the opportunity to also earn higher returns. Customers gain from having the firm exert such targets. However, executives may choose a lower target (associated with comparatively lower potential returns).

(4) **Quality of service** can suffer under price cap as well as other forms of regulation, so special attention must be paid to establishing rewards for good performance and penalties for poor performance. Of course, quality improvements take resources, so determining the optimal level of quality can be problematic. There is much to be learned from experience in other

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2These frames were identified by participants in a two-day training course at the Massachusetts Department of Telecommunications and Energy (May 1999). The author had provided an overview of regulatory principles and incentive regulation. Attendees indicated that these twelve concepts represented fundamental building blocks in developing policies that promoted good industry performance.
Two related issues arise in the context of current restructuring initiatives around the globe: the impact of mergers (and reduced competition?) on quality and the impacts of vertical disintegration on system reliability.

(5) **Statistical benchmarking** can reduce information asymmetries. Regulatory agencies can share information or use data filed at the federal level to make comparisons across comparable firms, generating units, or other entities. For example, if advertising is a concern, what is the ratio of advertising to revenue of comparable firms. For incentive purposes, the best comparisons are on some overall dimension. Focusing on heat rates or unit availability can result in an electric utility devoting excessive resources to meeting a specific target. The publication of overall performance comparisons can also put pressure on poorly performing firms.

(6) **Rate design** influences allocative efficiency. The topic raises important issues. Should firms be the ones to initiate new price structures or should regulators actively participate in this area? The case of price discrimination in terms of senior citizen discounts (say, for reduced telephone price for a limited number of calls) illustrates a dilemma facing regulators. Many elderly are well off, while many young families have little earning power. Targeting specific groups for the receipt of social subsidies is less costly than a generalized rate reduction that limits the firm's ability to expand service to new (often poor) customers. Allowing firms to respond to different price elasticities can enable them to recover fixed costs, while offering service to a larger number of people. Of course, reasonable people can differ on what is legitimate price differentiation and what is undue price discrimination.

(7) **Inter-industry rivalry** presents complex regulatory issues: cable vs. wire-line telephone companies, and gas vs. electric for residential heating. Agencies will be called upon to mediate disputes on a regular basis. A related difficulty is judging whether gains in one industry (eg, from a telecom/cable merger) are sufficient to offset potential losses of competition in another industry. It will be very difficult to determine when competitive options are adequate to allow agencies to step back from the process. We can expect many issues to arise in the future as industry boundaries become blurred.

(8) **High quality staff** need to be rewarded if they are to be retained by regulatory agencies. Studies would reveal relatively low staff salaries compared with comparable utility managers. Without highly motivated technical staff, the studies analyzing alternative policies will be inadequate—leaving regulators to base their judgements on meager data. Attracting and retaining engineering capabilities is particularly important. Many observers recommend separating the salaries of regulatory analysts from general civil service compensation so that a high caliber staff can be maintained.

(9) **Analytic independence** may be as important as political independence from the standpoint of developing sound regulatory policies. Given the growing complexity of the issues associated with a transition to more competitive markets, staff skills become even more important. The use of contract consultants (possibly paid for by regulated firms) represents...
one technique for augmenting expertise at an agency. Note that the separation of regulation from management is a prerequisite for agency independence.

(10) **Techniques** can enhance regulatory performance. In particular, economists can help those with legal backgrounds understand why certain strategies are being emphasized. Legal experts can help in the design of programs that are consistent with relevant laws. They can also help develop rationales for changing those laws. Similarly, engineers can be helpful in developing forward-looking measures of costs. Accountants can help the team understand the implications of alternative rate designs for covering embedded costs.

(11) **Strategic regulation** is a natural response to strategic behavior by other stakeholder groups. Improved analysis can strengthen responses to various proposals (or positions) presented by important groups. Furthermore, if new objectives are added to those initially given the agency (say, energy conservation) additional instruments must be given to the agency as well. In some countries, competition is viewed as both an objective and as an instrument of regulation. For example, Australian access regulation raises its own set of incentive issues related to investment in facilities that might be subject to third party access to "essential"—natural monopoly—facilities. Setting the terms and conditions of access raises incentive issues and jurisdictional problems (Maddock and Marshall, 1997). Clearly, the ACCC must identify and prioritize its objectives if policies are to be effective.

(12) **Strategic Relationships** are important to getting the commission’s intentions, objectives, and policies clearly laid out by the press becomes a significant agency activity. Headlines sell newspapers and sound bites win the evening news. So the education of journalists and the general public warrants substantial attention. The best technical studies and innovative regulatory incentive schemes will not be accepted if their rationales cannot be communicated to major stakeholder groups. In fact, those with narrower interests need to be brought into the decision-process early on so that their perspectives can be heard and taken into account—to the extent that important objectives are not sacrificed.

**Concluding Observations**

Since regulatory agencies are basically setting constraints on corporate behavior, those implementing public policy need to understand what is driving decisions in the marketplace. A brief review of market processes can help us identify the challenges facing regulators who are trying to simulate competitive outcomes.

How do firms create value? First, they create value by lowering costs. Valuable resources are freed up and used in other sectors of the economy. Second, since value is in the eyes of the consumer, value is created when product quality improvements or entirely new products better meet the needs of consumers. In competitive markets, firms creating value are able to capture profits from the risk-taking activity. Economic profits represent returns to equity investors who put their capital at risk. Normal returns arise from normal performance. Above-normal returns arise from superior performance (reflecting best-practice in operational effectiveness and
selection of a strategy that meets the preferences of consumers and builds on the capabilities of the firm).

There are clear links between economic principles and business decision-making. Investors respond to signals provided by the securities markets and firms enter and exit markets based on profit expectations. Similarly, incentives established by regulators (including entry policies and access regulation) have significant impacts on what firms do and how they do it. Unless agencies understand the processes underlying decisions in an unregulated setting, they will be unable to do a good job of meeting public policy objectives through appropriate selection and use of policy instruments (Berg, 1996). In particular, by encouraging firms to create value (via cost-containment and the introduction of valued new services) regulators can enhance industry performance. However, if poor incentives are promulgated, value can be destroyed, as investors withdraw capital from the industry or costs drift upward in response to cost-of-service regulation. The art of regulation involves establishing rules that allocate value to consumers and suppliers in such a way as to maintain incentives for the firm to create value, while maintaining political legitimacy in the eyes of consumers and other stakeholders.

Bibliography


