Incentive Regulation and the Regulation of Incentives *by Glenn Blackmon* (Kluwer Academic Publishers, Dordrecht and Boston, 1994), pp. x + 133, US$69.95. ISBN 0 7923 9470 4.

Blackmon's fundamental observation is that the term "incentive" in incentive regulation is redundant. Government intervention by definition establishes a system of rewards and penalties for private decision-makers. The resulting incentives can be dysfunctional, but regulation cannot help but create incentives of some type. This book explains how regulation affects behavior, as traditional and more recent varieties of regulation in the United States are compared and contrasted. It suggests ways to make the intervention productive, rather than dysfunctional.

The book begins with a survey of why cost minimization is problematic under regulation. Insights from the principal-agent/incentive literature are used to show the implications of firms and regulators having different information, capabilities, and objectives. Agents (corporate executives) engage in opportunistic behavior that promotes their objectives rather than those of the regulator. The terms organizational slack, shirking behavior, and engaging in abuse are synonyms for the resource-utilizing actions that cannot be monitored by regulators. Although regulators have information on firm expenditures, these reported numbers consist of a combination of necessary production costs and other outlays that provide some benefit to managers (and perhaps stockholders). Blackmon notes that actual managerial abuse cannot be monitored—he prefers using the term abuse to "reduced managerial effort" which the principal-agent literature tends to use. The latter is slightly more value-neutral, and reflects the realistic view that corporations are capable of different levels of efficiency. Since the achievement of best-practice can be quite costly from the standpoint of managerial effort, I find Blackmon's utilization of the term "abuse" as an unnecessary rhetorical device. Whatever the behaviour is labeled, it is clear that necessary costs and other outlays cannot be disentangled. It should be noted that in practice, regulators punish detected inefficient behaviour through cost disallowances and other regulatory penalties. Nevertheless, the traditional regulatory emphasis on procedural fairness in the U.S. can be shown to induce inefficiencies. Regulators cannot count what really counts, but they can at least follow precedents!

Traditional regulation in the U.S. involved a bottom-up approach: costs were aggregated and service prices reflected the results of complex (and arbitrary) cost allocations. Postage-stamp pricing resulted within a utility's territory with customers in high cost rural areas and low cost urban areas paying the same prices. The political advantages of such regulatory treatment made for a stable situation. The beneficiaries of the rules were well aware of their gains, and the costs were spread over a larger population. Politicians also argued that income distributional concerns or universal service obligations justified the higher prices borne by some customers. Furthermore, since local telephone rates were held down due to transfers from long distance customers, the cross-subsidies came at the expense of "others". Blackmon does not explore the political economy of rate design, but focuses on the recent movement to price-based regulation, generally involving some form of profit-sharing between stockholders and customers.

The purpose of these regulatory policy changes has been to avoid the inefficiencies associated with cost of service regulation. Blackmon identifies these as the AJ effect (overcapitalization which leads to production and allocative inefficiencies), cross-subsidization (entering competitive markets and recovering costs from core customers), excessive or inadequate service quality, and employee/managerial slack. The extent of these inefficiencies is an empirical question, although studies of the impacts of competitive pressures and "incentive" regulation suggest that the inefficiencies associated with traditional regulation were significant. However, it is hard to distinguish between the competition effect and the regulation effect, since reductions in entry barriers and incentive regulation often occur simultaneously.

The organization of the book lets the reader move through incentive issues in a systematic way. After a short introduction, the author summarizes the sources of incentives for costly production. In Chapter 3, regulatory lag, monitoring and the problem of abuse are described in some detail. Blackmon models utilities as maximizers of the discounted present value of profits and "net abuse." Firms are characterized as having the information and opportunity enabling them to benefit at the expense of ratepayers. In 1988, the direct cost of regulatory agencies in the U.S. amounted to about $.50/month per household—a trivial sum for oversight activity in comparison to the amount consumers spent on electricity, telecommunications, and other infrastructure services. Blackmon argues that both additional regulatory monitoring activity and longer regulatory lags between rate reviews can promote efficient production, although prices in excess of incremental costs mean that allocative efficiency is still sacrificed.

Chapter 4, entitled "Incentive Regulation and the Half Loaf" describes the outcome of new types of regulation as better than "no bread", but still falling short of potential gains from improved incentive mechanisms. This reviewer found his summaries of several state plans and the detailed critique of Washington state particularly useful. Rate freezes characterize these plans. The state plans adopted in California, Illinois, Michigan, and elsewhere tend to have a range over which cost reductions do not lead to price reductions, so profits are earned on a dollar for dollar basis. Usually, sharing sets in at some point (say, at a particular realized rate of return), and beyond some return, all of the savings are passed on to customers (in the form of lower prices or rebates in a future period). The Washington plan has one feature Blackmon likes: the firm captures an increasing share of the profits—so the disincentives associated with a profit cap are avoided. However, he critiques other features of that particular incentive plan: excessive rewards to small increases in efficiency and inadequate rewards for larger improvements, distorted risk-taking (depending on whether one is at the top or bottom of the sharing scheme), and intemporal manipulation of outlays—so the bunching of expenses can increase profits.

I was surprised that he did not develop the possible policy of giving firms an option regarding price caps and sharing rules. Such a policy establishes several plans, with different productivity ('X') factors. Low performance targets (prices that fall more slowly) are linked to lower rewards, with high performance targets having sharing rules that have higher (possibly unlimited) profit potential for the firm. Such optional schemes induce firms with substantial potential for cost containment to self-select into the appropriate plan. The FCC price caps applied to local exchange carrier access charges had this feature. Since this scheme has some excellent incentive properties, it would have been a useful addition to Blackmon's survey (beyond a brief allusion in one footnote, as is currently the case).

In Chapter 5, Blackmon draws upon his own 1992 *Journal of Regulatory Economics* article which summarizes and extends some of the theoretical literature on incentive regulation, particularly the Sappington-Sibley Incremental Surplus Subsidy (ISS) scheme. That modified ISS scheme compensates the firm based on the change in total surplus each period. Blackmon points out that when regulators cannot commit to stand by their rules, firms will anticipate that behavior, and set price above marginal cost under ISS. He concludes that regulators still face trade-offs between promoting production and allocative efficiency—although ISS schemes do provide an additional instrument compared with traditional rate of return regulation.

In a sense, the telecommunications regimes described here are straw men. These highly stylized characterizations of regulation allow the author to highlight the strengths and limitations of alternative regimes and sharing rules. However, the buy-ins (initial prices, plant modernization mandates, and plan durations) accompanying the state incentive plans are not discussed. Nevertheless, Blackmon demonstrates that the deficiencies of the bottom-up cost-plus approach are substantial. Regulatory micromanagement cannot induce efficient production. A top-down price caps and sharing rules approach represents an improvement over the status quo—though problems still exist.

In addition, many important issues are not addressed or even alluded to in Blackmon's survey. The transition to more competitive telecommunications markets has often involved new types of regulation rather than less regulation in the evolution to new industry structures. Numerous contentious issues are still being fought in hearing rooms: funding universal service, maintaining network interoperability, ensuring service quality, developing number portability, continuing supplier of last resort obligations, determining the appropriate extent of unbundling, and designing efficient prices for network components. The convergence of voice, data, information services and video markets raise numerous issues regarding entry, service quality and interconnection. Blackmon chooses to focus on the broader issue of sharing mechanisms. However, these other issues warrant attention as they illustrate the complex problems facing policy-makers. In particular, entry policy represents a potential substitute for price and profit regulation.

In the last chapter, Blackmon presents concluding observations on incentive plans. He notes that making telecommunications firms more profit-driven (reducing incentives for "abusive behavior") can be a win-win situation, although some customers might be worse off under price caps and sharing rules. For example, he notes that firms may be less tolerant of non-paying (generally, low income) customers and their willingness to promote environmental investments may be reduced. Electricity demand-side management programs also suffer to the extent that they decrease net case flows to the firm. According to the author, these perceived negatives do not outweigh the efficiency gains from current incentive regulation. However, he urges improvements in state plans. His own incentive plan provides the utility with 100% of changes in profits (on the margin) so that incentives are not capped (as with many state plans). To address the regulatory commitment problem, Blackmon proposes that plans be established for a fixed time period, with regulators deciding halfway through a plan whether it should be rolled over for another term. Whether the accompanying rate freeze sufficiently promotes allocative efficiency is another question.

This book is not a comprehensive survey of incentive regulation. Far more than one-hundred pages would be needed for such a volume. Instead, the Blackmon treatise is idiosyncratic, focusing on his own contributions to the literature and on the issues associated with profit-sharing that he identified in the Washington State case. Still, it represents a useful comparison of traditional and more recent varieties of regulation in the U.S.. The author notes that the intended audience includes scholars as well as regulators and executives. He acknowledges the danger of having the material fall between these groups. Nevertheless, the benefits from attempting to bridge principles and practice are worth the inevitable gaps in the book's analysis.

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