

## The Effective Regulator: Education

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*The great aim of education is not knowledge but action.*

— Herbert Spencer

*An educated person is one who has learned that information almost always turns out to be at best incomplete and very often false, misleading, fictitious, mendacious—just dead wrong.*

— Russell Baker

*I was determined to know beans.*

— Henry David Thoreau (from Walden)

*I am still learning.*

— Michelangelo

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The purposeful regulator defines the public interest, then shapes regulation to align private behavior with it. This purposefulness is ineffective without education. The educated regulator knows regulation's six subject areas, its six legal sources, its five professions, and its three processes.

### Regulation's Six Subject Areas: What Do We Regulate?

Regulation focuses on nouns and verbs: We regulate regulated companies performing regulated activities. A regulatory statute identifies both: the actions (verbs) requiring regulation, and the actors (nouns) whose actions will be regulated. These nouns and verbs interact within six subject areas.

**Market structure:** Are customers served best—in terms of efficiency, innovation, and accountability—by a competitive market or a monopoly market? Regulation first selects the market structure, then guides the market's performance. For monopoly markets, regulation establishes standards for pricing, quality, physical infrastructure, financing, and corporate structure. For competitive markets, regulation licenses the entrants, opens access to bottleneck facilities, conditions market-concentrating events (like mergers and asset acquisitions), and monitors prices for reasonableness.

**Pricing:** Effective regulation links pricing with performance. The first choice is between regulated prices and market prices: Should the regulator set the rates, is competition sufficiently

vigorous to discipline prices without regulatory caps? Then comes more complexity. For regulated prices: Should we base them on average costs (so as to recover the "revenue requirement"), or on marginal costs (so as to induce efficient consumption and production)? For market prices: Should we establish prerequisites for competitiveness before unleashing the players (to protect consumers from "unregulated monopolies")? There are many elaborations on these questions.

***Quality of service:*** Regulation establishes performance standards, then translates standards into metrics, such as calls dropped, frequency and duration of outages experienced, customer complaints serviced, capital structure maintained, innovations implemented.

***Physical adequacy:*** Infrastructural companies need infrastructural assets. Regulation identifies the physical prerequisites for adequacy, then uses this knowledge to evaluate a utility's continuing capacity to serve.

***Financial structure:*** Regulation establishes expectations for financial condition, including the appropriate mix, quality, and cost of debt and equity required for viability.

***Corporate structure:*** Mergers, acquisitions, divestitures, product diversification, territorial expansion, and interaffiliate transactions—all affect everything else: market structure, pricing, quality, finance. Regulation seeks to align corporate activities with the utility's core obligation to serve.

For each of these five subjects, the educated regulator learns the industry-specific and state-specific facts. Which companies are present; what services do they sell at what prices, under what corporate structure and with what market share; what are the relevant performance metrics and how do the utilities rate; what infrastructure exists and what is its capability; what are the financial conditions within each company and across each industry; what agencies have jurisdiction over which players and activities?

## **Regulation's Six Legal Sources: What Authority Do Regulators Have?**

The law of regulation answers three main questions: What are regulators' powers? When exercising these powers, what procedures must they follow? What are the sellers' and buyers' rights and obligations? The answers emanate from six legal sources: ***state and federal substantive and administrative law*** (that's four), and ***state and federal constitutional provisions***.

***Substantive law*** establishes (1) the regulator's duties and powers; (2) the sellers' and buyers' obligations, rights, and powers; and (3) each player's remedies against the others. ***Administrative law*** establishes the procedures for decisionmaking and for resolution of grievances.

Five features of *federal constitutional law* protect parties by limiting regulators' powers. The "dormant" Commerce Clause restricts states' powers to regulate, and discriminate against, interstate commerce. The Contract Clause restricts states' powers to impair existing contracts. The Takings Clause prohibits government regulation that "takes" private property without compensating the owner justly. (In utility regulation, this principle prohibits regulators from interfering with "legitimate, investment-based expectations," without just compensation to the investors.) The Supremacy Clause preempts states from enacting or applying state laws that conflict with Congressional intent. The Due Process Clause compels procedural fairness.

These six sources of law emanate from at least six fora: state legislatures, Congress, state and federal agencies, and state and federal courts. And there are other regulatory agencies: land use, environmental, labor, tax, and financial regulators, all intersecting with utility regulation.

## **Regulation's Five Professions: On What Expertise Does Regulation Depend?**

*Lawyers* advise on the regulator's substantive jurisdiction, duties, and authorities; on sellers' and buyers' rights and obligations; and on procedures necessary to lawful decisionmaking.

*Accountants* deal with dollars. They track costs and evaluate expenditures. Cost tracking catches cross subsidies, and helps economists assign costs to cost causers. Expenditure evaluation protects against imprudence.

*Finance experts* study the utility's capital requirements, recommend the proper mix of debt and equity, evaluate financial risks, and apply cost-benefit analyses to short- and long-term investments.

*Economists* aim for economic efficiency by making cost causers the cost bearers. They recommend rate designs and evaluate investment prudence. Where regulators use market forces to discipline seller behavior, economists measure and monitor competitiveness.

*Engineers* explain how things work. They evaluate utility performance by identifying the best available technology, and by assessing infrastructure adequacy and reliability.

## **Regulation's Three Processes: What Do Regulators Do?**

Regulation involves three main processes: *information gathering*, *decisionmaking*, and *enforcement*. Each process has variations in formality and finality. Who can prompt these processes? The regulator, legislators, the regulated entities, consumers, or other citizens.

## **Recommendations for Educated Regulators**

*The educated regulator asks: Do I know everything discussed in this essay? If not, then:*

- 1. Have I created a personal curriculum?*
- 2. How do I learn the basics first, then add the necessary layers of complexity and sophistication?*
- 3. Am I allocating sufficient time to my education needs?*
- 4. On whom, and on what sources, should I rely for my education? Who out there is objective, and who will take advantage of my inexperience?*
- 5. How do I judge the quality of the education I'm receiving? Is it sophisticated or simplistic? Analogizing it to language-learning tapes—does it get me only from airport to hotel, or does it empower me to participate fully in society?*
- 6. Does my agency and my community take responsibility for educating me on all these topics, or am I on my own? Is this situation satisfactory?*