

Sliding Plan, Price Cap and Regulation By Performance Policies

Other recent policies to improve utility regulation include a sliding scale plan and price caps. With a sliding scale the new allowed rate of return equals the old rate plus some percent of how much the existing rate deviates from the target rate of return. In this case, the new allowed rate of return is

$$r_a = r_t + h(r^* - r_t)$$

r_a = allowed rate of return from new prices.

r^* = target rate of return or the same as s above.

r_t = actual rate of return at initial prices.

h is a constant in the interval $[0,1]$

If $h = 1$, the new rate is the same as in rate of return regulation which equals cost plus a return on capital. There is no gain for being efficient and no pain for being inefficient. If $h = 0$ this regulation is equivalent to a fixed rate. The utility firm receives all gains from efficiency but receives all the losses from a cost increase. If $h = 0.5$, then expected benefits and costs are shared with half going to utility owners and half going to consumers.

Another suggested incentive type regulation is a price cap, which has been used in the U.S. by the Federal Communications Commission for telephones and in the UK for the privatized industries (telephone, gas and water). The regulated company is free to lower prices or to raise prices at the rate of inflation minus expected productivity. This gives firms incentives to be cost efficient, since they can keep any extra productivity gains. Empirical studies suggest that a price cap is superior to rate of return regulation.

Regulation by performance standards allow regulators to penalize utilities giving them lower rates of return for poor performance such as higher costs, lower productivity gains, or low capacity use but reward well performing utilities with higher rates of return.