Price Cap Regulation

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Regulation of pricing in critical industries is not a new phenomenon in many parts of the world. The United States and Canada have a long history of regulation of the telecommunications industry and, over the last 25 years, the telecommunications industry in the United Kingdom has employed Price Cap Regulation (PCR) (Sappington and Weisman, 2010). Similarly, other key industries such as pharmaceuticals have also had price regulations imposed upon them (Matsushima, 2008) and, recently, there has been great discussion the US about regulation of debit card 'swipe' fees and the maximum charge that a bank ought to charge (Marotta, 2011).

Currier and Jackson (2008) confront the idea of PCR and compare it against an older system of price regulation, Rate-of-Return Regulation (ROR). The author's do not attempt an ethical dissection of whether governmental price regulation on a private company is correct or not; rather, they take as an assumption that natural monopolies - such as telecommunications, electricity, and water – must and will be regulated as a matter of "profound practical significance" (Currier and Jackson, 2008, p 262). Rather, they examine the aspects of both PCR and ROR, their methodologies, and their strengths and weaknesses.

Historically, traditional price regulation has been based on allowing the firm to raise prices above marginal costs enough to earn what is deemed a fair rate of return, with 'fair' being loosely defined as the firm's opportunity cost (Currier and Jackson, 2008, p 262); however, despite allowing the firm to earn a decent rate of return, the issues face revolve around calculating 'fair' and what the correct opportunity cost is and, more importantly, a lack of incentives on the firm's behalf to reduce costs. Essentially, if the firm is allowed to make a profit

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above and beyond whatever their costs are, the firm can be wasteful and still be profitable (Currier and Jackson, 2008, p 262).

The solution, according to the authors, is the PCR model. A Price Cap is efficient because it severs the link between prices and costs. The Price Cap itself is allowed to increase correspondingly with inflation, with a deduction for productivity improvements, and then is revisited at routine intervals such as every five years. Between these intervals the firm is allowed to keep all returns without fear of rebuttal or the price cap resetting and, by extension, is encouraged to minimize costs and improve productivity to lower its cost per unit (Currier and Jackson, 2008, p 264).

One potential negative effect is that to save costs the firm might cut service quality, such as a helpdesk or the timeliness of onsite technician support. This can be countered, according to the authors, by further regulation and penalties for failing to reach quality goals (Currier and Jackson, 2008, p 267).

Supporting Arguments

Grimm and Zöttl (2010) take the approach that "price caps have been proposed in a variety of industries as a mean to combat the exercise of market power" (Grimm and Zöttl, 2010, p 1), and they also acknowledge that the classical interpretation of price control is to set the price cap to marginal cost (Grimm and Zöttl, 2010, p 1). Taking issue with marginal cost as the basis for the price cap, the authors use the variable of both cost and demand uncertainty as a mechanism to de-couple price cap with marginal cost. Through an exhaustive analysis, price caps are found to be effective in different areas in different circumstances:

• High price caps with uncertain demand lead to increased production and welfare (p.

10);

- Price caps close to marginal cost can be desirable in any known demand scenario (p. 13);
- Low price caps are usually harms (p. 13);
- "The welfare optimum" can never be reached with any price cap under demand uncertainty (p. 13).

Kevin Currier (2009) discusses price cap regulation of a firm when it begins to face competition. As an example, the telecommunication industry in the United States has historically had price regulation yet, due to technological advances and some de-regulation, has also opened up to competition. The standard PCR allows for the regulated firm to set their price anywhere beneath the maximum price regulated. Considering that "an incumbent firm has strong incentives to engage in anticompetitive behavior to discourage competitive entry" (Currier, 2009, p 222), it is possible for the regulated firm to set their price so low as to fend of competition before it really starts. In the case of the beginnings of competition, Currier does not argue for the deregulation of prices to foster competition; rather, he argues for continued regulation and a watchful eye on the part of the regulators to foster competition (Currier, 2009).

Sappington and Weisman (2010) view PCR pricing as a method of acting as 'competition' in an otherwise non-competitive essential market (Sappington and Weisman, 2010). As Currier and Jackson suggest, Sappington and Weisman agree that a PCR is more aligned with underlying costs than ROR, especially with annual adjustments tied to inflation (Sappington and Weisman, 2010, p. 229).

Empirical evidence is supplied showing that under PCR, telephone prices have fallen,

productivity increased, and a more modern infrastructure deployed (Sappington and Weisman, 2010, p. 236). However, unlike the initial argument that an effective PCR will encourage a firm to lower costs, Sappington and Weisman point to studies that show cost savings come instead from improved productivity rather than lower costs in a lightly competitive environment. When competition is introduced, costs then tend to decrease (Sappington and Weisman, 2010, p. 237). The key takeaway is that efficiencies were made and consumer prices lowered as predicted with a PCR, with more growth seen with a PCR over an ROR.

Counter Arguments

Despite that Price Cap Regulations can have positive effects for growth, productivity, and user price, there are negative side effects as well. Golec, Hegde, and Vernon, 2010, point out that the mere thread of price regulation in the US pharmaceutical industry in the early 1990's led to decreased stock prices and a drop in R&D spending (Golec, Hegde, and Vernon, 2010). The authors point to empirical evidence from 1990 to 2003 shows that not only did R&D slowdown, but there was no increase at all in new drug applications (Golec, Hegde, and Vernon, 2010, p. 251), but that firms were putting more resources into marketing already approved drugs (Golec, Hegde, and Vernon, 2010, p. 254), further strengthening the position that the threat of price controls was enough to impact R&D.

It is worthwhile to note that this article did not actually examine the impact of a price control on pharmaceutical R&D, but rather the threat of price control on pharmaceutical R&D. It is very possible, and even admitted by the authors, that the drop in R&D was a political maneuver by the companies to prevent price control from happening to begin.

Frank (2011) looks further into the effects of PCR on R&R, though he focuses more on

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telecommunication than pharmaceuticals. His conclusion is that "R&D is greatest when firms cooperate in the production of research, fully share all research information, *and are unregulated*" (emphasis added) (Frank, 2011, p. 60-61). Further, he points out that price cap regulation tends to lead to lower total welfare (Frank, 2011, p. 59).

The most efficient and forthcoming opposition to price caps of any form comes from Zwolinski, 2008. In "The Ethics of Price Gouging," he acknowledges that the opposite of price caps – price gouging – is typically prohibited by law, but that it should not be due to a number of factors. He uses as his over riding example a State of Emergency, how "price gouging" actually benefits the community in need, and a number of moral issues that arise from implementing price cap and "anti gouging" laws.

First, the author points out that it is incredibly difficult for a merchant to understand what "gouging" entails. If the cost of doing business increases for a merchant in a time of emergency, is the merchant allowed to pass on that price increase, or is the merchant restricted from doing so? Should there be no account made for the risk of staying open during a time of emergency or disaster? Mostly, Zwolinski argues, anti price gouging laws blatantly ignore the central concept of supply and demand, in which people are willing to pay more for things they need (Zwolinski, 2008, p. 352).

Discussing the basic tenants of supply and demand, Zwolinski reminds that if prices are kept artificially low, suppliers will quit supplying as they are not making a profit (Zwolinski, 2008, p. 352). Further, he argues, "price gouging" is perfectly legit, as both seller and buyer agree to the exchange (p. 354), the proposed exchange will stand to improve the lot of the buyer (p. 355) and that by increasing prices in areas of need, needed goods will be diverted to that location to assist (Zwolinski, 2008, p. 355). From a moral standpoint, the author also asks, outright, is a 'price gouger' doing anything worse by offering to sell needed items – even at a higher rate – than most people who do nothing at all to help those in a disaster situation. In fact, he argues, those who are performing the 'price gouging' are actually performing a service.

Conclusion

There was a dearth of academic articles disputing the positive effects of price caps. Marotta, 2011, did provide an opinion peace outright rejecting artificial price caps, and Zwolinski wrote an entire article about the ethics of raising prices in a state of emergency, but outside that the majority of published articles was much more soft in their approach.

From the standpoint of defending price caps, many articles point to 'natural monopolies' and 'necessary services' as examples of where price regulation is a requirement to keep the monopoly or service from taking advantage of its lack of competition. Several articles conclude that price regulation is a requirement only until legit competition can be supplied, at which point regulation must be abandoned.

Areas of 'natural monopolies' ought to be regulated if they provide a key, critical service to the population at large, such as the early days of telecommunications, or electric and water utilities, where only one water pipe, for example, can realistically reach the house. However, should competition be available, regulation must be removed in lieu of market forces which, as Zwolinski reminds, move goods to where they are needed and meet the demands placed upon them.

References

- Currier, K. M. (2009). Price cap regulation of a dominant firm facing competition. *Journal Of Economics*, 98(3), 221-233. doi:10.1007/s00712-009-0092-9
- Currier, K. M., & Jackson, B. K. (2008). A Pedagogical Note on the Superiority of Price-Cap Regulation to Rate-of-Return Regulation. *Journal Of Economic Education*, 39(3), 261-268.
- Frank, M. W. (2011). Price-Cap Regulation and the Incentive to Cooperate in Research. *Journal Of Business Strategies*, *28*(1), 59-73.
- Golec, J., Hegde, S., & Vernon, J. A. (2010). Pharmaceutical R&D Spending and Threats of Price Regulation. *Journal Of Financial & Quantitative Analysis*, 45(1), 239-264.
- Grimm, V., & Zöttl, G. (2010). Price Regulation under Demand Uncertainty. *B.E. Journal Of Theoretical Economics: Advances In Theoretical Economics*, *10*(1), 1-32.
- MAROTTA, D. (2011). Price controls are never good economics. *Hudson Valley Business Journal*, 22(44), 6.
- Matsushima, N. (2008). Price regulation, product location, and welfare. *Journal Of Economics*, *95*(3), 233-253. doi:10.1007/s00712-008-0032-0

Sappington, D., & Weisman, D. (2010). Price cap regulation: what have we learned from 25

years of experience in the telecommunications industry?. *Journal Of Regulatory Economics*, 38(3), 227-257. doi:10.1007/s11149-010-9133-0 Zwolinski, M. (2008).THE ETHICS OF PRICE GOUGING. *Business Ethics Quarterly*, 18(3), 347-378.