# **SPRINGER LINK**

— Menu

Search

☐ Cart

Home > Journal of Regulatory Economics > Article

# Price-cap versus rate-of-return regulation

Published: March 1993

Volume 5, pages 25–48, (1993) Cite this article



#### **Journal of Regulatory Economics**

Aims and scope → Submit manuscript →

Catherine Liston<sup>1</sup>

### **Abstract**

Rate-of-return regulation has been criticized for providing inappropriate incentives to regulated firms and for being costly to administer. An alternative is price-cap regulation, by which ceilings ("caps"), based on indices of price and technological change are imposed, below which the regulated firm has full pricing freedom. The differences and similarities of the two are reviewed herein in the light of recent literature. In practice, price-cap is not distinct from rate-of-return regulation. Especially for the multiproduct firm, information requirements—the ultimate source of problems with rate-of-return regulation—are comparables. Price-cap regulation fails to address the real regulatory issue of whether an industry is, in whole or in part, a natural monopoly.

This is a preview of subscription content, <u>log in via an institution</u> to check access.

#### Access this article

#### Log in via an institution →

#### Buy article PDF 39,95 €

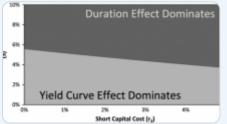
Price includes VAT (Poland)

Instant access to the full article PDF.

Rent this article via <u>DeepDyve</u> [?

<u>Institutional subscriptions</u> →

### Similar content being viewed by others





The capital structure of a firm under rate of return regulation: Revisited durability and the yield curve

**Article** 25 February 2015

Chapter © 2016



Product regulations and persistence of profits: OECD evidence

Article Open access
05 September 2018

### References

Akerlof, G. 1970. "The Market for 'Lemons:' Qualitative Uncertainty and the Market Mechanism." *Quarterly Journal of Economics* 84:488–500.

**Google Scholar** 

Acton, J.P., and I. Vogelsang. 1989. "Introduction to the Price-Cap Symposium." *Rand Journal of Economics* 20 (No. 3, Autumn): 369–372.

Averch, H., and L. Johnson. 1962. "Behavior of the Firm under Regulatory Constraint." *American Economic Review* 52:1052–1069.

**Google Scholar** 

Babe, R. 1990. Telecommunications in Canada, University of Toronto Press.

Baron, D.P. 1989. "Design of Regulatory Mechanisms and Institutions." chap. 24 in Schmalensee, R., and Willig, R.D. Handbook of Industrial Organization, New York: North Holland, p. 1555.

**Google Scholar** 

Baron, D. 1991. "Information, Incentives and Commitment in Regulatory Mechanisms: Regulatory Innovation in Telecommunications." In *Price Cap and Incentive Regulation in Telecommunications*, edited by M.A. Einhorn. Boston: Kluwer.

**Google Scholar** 

Baumol, W.J. 1977. "On the Proper Test for Natural Monopoly in a Multiproduct Industry." *American Economic Review* 67:809–822.

**Google Scholar** 

Baumol, W.J., and D.F. Bradford. 1970. "Optimal Departures from Marginal Cost Pricing." *American Economic Review* 60:265–283.

Google Scholar

Baumol, W.J., E. Bailey, and R. Willig. 1977. "Weak Invisible Hand Theorems on the Sustainability of Prices in a Multiproduct Monopoly." *American Economic Review* 67(3): 350–365.

Baumol, W.J., and A. Klevorick. 1971. "Regulation: An Overview of the Discussion." *Bell Journal of Economics and Management Science* 1:162–190.

**Google Scholar** 

Baumol, W.J., J. Panzar, and R. Willig. 1982. *Contestable Markets and the Theory of Industry Structure*. New York: Harcourt, Brace, Jovanovich.

**Google Scholar** 

Beesley, M.E., and S.C. Littlechild. 1989. "The Regulation of Privatized Monopolies in the United Kingdom." Price-Cap Symposium. *Rand Journal of Economics* 20 (no. 3, Autumn): 454–472.

**Google Scholar** 

Berkowitz, M.K., and E.G. Cosgrove. 1983. "Financing and Investment Behavior of the Regulated Firm." In *Economic Analysis of Telecommunications: Theory and Applications*, edited by L. Courville, A. de Fontenay, R. Dobel. Amsterdam: North-Holland.

**Google Scholar** 

Bernstein, J.I. 1983. "Taxes, Financing and Investment for a Regulated firm." In *Economic Analysis of Telecommunications: Theory and Applications*, edited by L. Courville, A. de Fontenay, R. Dobel. Amsterdam: North-Holland.

**Google Scholar** 

Besanko, D. 1985. "On the Use of Revenue Requirements Regulation Under Imperfect Information." In *Analyzing the Impact of Regulatory Change in Public Utilities*, edited by Michael A. Crew. Toronto: D.C. Heath and Company.

Bishop, M., and J. Kay. 1988. *Does Privatization Work?Lessons from the U.K.* London School of Economics.

Bradley, I., and C. Price. 1988. "The Economic Regulation of Private Industries by Price Constraints." *Journal of Industrial Economics* 37:373–391.

**Google Scholar** 

Braeutigam, R., and J. Panzar. 1989. "Diversification Incentives Under "Price-Based" and "CostBased" Regulation." Price-Cap Symposium. *Rand Journal of Economics* 20 (No. 3, Autumn): 373–391.

**Google Scholar** 

Brennan, T.J. 1989. "Regulating by Capping Prices." *Journal of Regulatory Economics* 1:133–147.

Google Scholar

Breyer, S., and P. MacAvoy. 1987. "Regulation and Deregulation." In *The New Palgrave: A Dictionary of Economics*, edited by J. Eatwell, M. Miligate, and P. Newman. New York: Stockton Press.

Google Scholar

Brown, S., and D. Sibley. 1986. The Theory of Public Utility Pricing, Cambridge: Cambridge University Press.

Google Scholar

Cabral, L., and M. Riordan. 1989. "Incentives for Cost Reduction Under Price Cap Regulation." *Journal of Regulatory Economics* 1:93–102.

Cabral, L., and M. Riordan. 1991. "Incentives for Cost Reduction Under Price Cap Regulation." In *Price Cap and Incentive Regulation in Telecommunications*, edited by M.A. Einhorn. Boston: Kluwer.

**Google Scholar** 

Christensen, L.R., D. Cummings, and P.E. Schoech. 1983. "Econometric Estimation of Scale Economies in Telecommunications." In *Economic Analysis of Telecommunications: Theory and Applications*, edited by L. Courville, A. de Fontenay, and R. Dobel. Amsterdam: North-Holland.

**Google Scholar** 

Crew, M., and K. Crocker. 1991. "Diversification and Regulated Monopoly." In *Competition and the Regulation of Utilities*, edited by M.A. Crew. Boston: Kluwer.

Google Scholar

Crew, M., and M. Frierman. 1991. "Information Economics and New Forms of Regulation." In *Competition and the Regulation of Utilities*, edited by M.A. Crew. Boston: Kluwer.

Google Scholar

Crew, M., and P. Kleindorfer. 1991. "Incentive Regulation, Capital Recovery and Technological Change in Public Utilities." Discussion paper, Center for Research in Regulated Industries, Graduate School of Management, Rutgers University.

Denny, M., A. de Fontenay, and M. Werner. 1983. "Comparing the Efficiency of Firms: Canadian Telecommunications Companies." In *Economic Analysis of Telecommunications: Theory and Applications*, edited by L. Courville, A. de Fontenay, and R. Dobel. Amsterdam: North-Holland.

Diewert, W.E. 1980. "Capital and the Theory of Productivity Measurement." *American Economic Review* 70(2): 260–267.

**Google Scholar** 

Einhorn, M.A. 1991., "Optional Calling Plans and Bypass Efficiency." in *Price Cap and Incentive Regulation in Telecommunications*, edited by M.A. Einhorn. Boston: Kluwer.

Google Scholar

Encaoua, D., and P. Koebel. "Reglementation et Dereglementation des telecommunications. Lecons anglo-saxonnes et perspectives d'evolution en France." Revue Economique, Edition speciale sur les telecommunications, (no. 2, March): 475–520.

Encaoua, D., and M. Moreux. "L'analyse theorique des problemes de tarification et d'allocation des couts dans les telecommunications." *Revue Economique*, Edition speciale sur les telecommunications (No. 2, March): 375-414.

Faulhaber, G. 1975. "Cross-subsidization: Pricing in Public Enterprises." *American Economie Review* 65:966–977.

Google Scholar

Faulhaber, G., and S. Levinson. 1981. "Subsidy-Free Prices and Anonymous Equity." *American Economic Review* 71(5): 1083–1091.

**Google Scholar** 

Finsinger, J., and Vogelsang, I. 1989. "Strategic Management Behavior Under Reward Structures in a Planned Economy." *Quarterly Journal of Economics*  Fuss, M.A. 1983. "A Survey of Recent Results in the Analysis of Production Conditions in Telecommunications." In *Economic Analysis of Telecommunications: Theory and Applications*, edited by L. Courville, A. de Fontenay, and R. Dobel. Amsterdam, North-Holland.

**Google Scholar** 

Fuss, M., and L. Waverman. 1977. "Regulation and The Multiproduct Firm: The Case of Telecommunications in Canada." In Studies in public regulation, edited by G. Fromm.

Gilbert, R., and D.M. Newbery. 1988. "Regulation Games." Discussion Paper No. 267, Centre for Economic Policy Research (September).

Hagerman, J. "Regulation by price adjustment." *Rand Journal of Economics* 21 (no. 1, Spring): 72–82.

Helliwell, J., and Lester, J. 1976. "A New Approach to Price Setting for Regulated Pipelines." *Logistics and Transportation Review* 11(3): 320–37.

Google Scholar

Henriet, D., and Volle, M. "Services de telecommunication: integration technique et differenciation economique." *Revue Economique*, Edition speciale sur les telecommunications (no. 2, March): 459–474.

Hillman, J.J., and R.R Braeutigam. 1989. *Price Level for Diversified Public Utilities*. Norwell, Mass.: Kluwer Academic Publishers.

Horwood, R., and A. Roman. "Price Cap Regulation: Easing the Regulatory Burden or Relinquishing Regulation?" Working Draft prepared for the Public Interest Research Centre, Ottawa, May 1989.

**Google Scholar** 

Isaac, R. 1991. "Price Cap Regulation: A Case Study of Some Pitfalls of Implementation, "Journal of Regulatory Economics (June): 193–210.

Johnson, L. 1989. "Price Cap Regulation in Telecommunications Regulatory Reform." Prepared for the Markle Foundation, Santa Monica, CA: Rand Corporation. N02894-MF/RC, January.

**Google Scholar** 

Johnson, L. "Excess Capacity in International Telecommunications." *Telecommunications Policy* II (no. 3, September): 281–292.

Joskow, P.L., and M. Noll. 1977. "Theory and Practice: Overview." In *Studies in Public Regulation*, edited by G. Fromm.

Joskow, P.L. "Pricing Decisions of Regulated Firms: A Behavioral Approach." *Bell Journal of Economics* 4 (no. 1, Spring): 118–140.

Joskow, P.L., and R. Schmalensee. 1986. "Incentive Regulation for Electric Utilities." *Yale Journal of Regulation* 4:1–49.

**Google Scholar** 

Kahn, A. 1988. The Economics of Regulation Cambridge, Massachusetts: MIT Press.

Kiss, F. 1983. "Productivity Gains in Bell Canada" In *Economic Analysis of Telecommunications: Theory and Applications*, edited by L. Courville, A. de Fontenay and R. Dobell. New York: North-Holland.

**Google Scholar** 

Kiss, F., and B. Lefebvre. 1987. "Econometric Models of Telecommunications Firms." *Revue Economique* Edition Speciale sur les Telecommunications (no. 2, March): 307–374.

**Google Scholar** 

Kiss, F. 1991. "Constant and Variable Productivity Adjustments for Price Cap Regulation." In *Price Cap and Incentive Regulation in Telecommunications*, edited by M. A. Einhorn. Boston: Kluwer.

**Google Scholar** 

Kwoka, J.E. 1991. "Productivity and Price Caps in Telecommunications." In *Price Cap and Incentive Regulation in Telecommunications*, edited by M.A. Einhorn. Boston: Kluwer.

**Google Scholar** 

Laffont, J.J. and J. Tirole. 1992. "A Theory of Incentives in Procurement and Regulation." Introduction. Forthcoming.

Laffont, J.J., and Tirole, J. 1990. "The Regulation of Multiproduct Firms." In *The Journal of Public Economics* 43:1–66.

**Google Scholar** 

Larson, A. 1991. "Predatory Pricing Safeguards and Telecommunications

Regulation." In *Competition and the Regulation of Utilities*, edited by M.A. Crew. Boston: Kluwer.

**Google Scholar** 

Lewis, T.R., and D.M. Sappington "Regulatory Options and Price-Cap Regulation." Price-Cap Symposium, *Rand Journal of Economics* 20 (no. 3, Autumn): 405–416.

Linhart, P.B., R. Radner, and F.W. Sinden. 1991. "A Sequential Mechanism for Direct Price Regulation." In *Price Cap and Incentive Regulation in Telecommunications*, edited by M.A. Einhorn. Boston: Kluwer.

**Google Scholar** 

Littlechild, S. 1983. "Regulation of British Telecom's Profitability" Report to the Secretary of State, Department of Industry, London.

**Google Scholar** 

Loeb, M., and W.A. Magat 1979. "A Decentralized Method for Utility Regulation." *Journal of Law and Economics* 22:399–404.

**Google Scholar** 

Lyon, T., and M. Toman. 1991. "Designing Price Caps for Gas Distribution Systems." *Journal of Regulatory Economics* (June): 175.

MacAvoy, P.W., and K. Robinson. "Losing by Judicial Policymaking: The First Year of the AT&T Divestiture." *Yale Journal of Regulation* 2:225–262.

Mathios, A.D., and R. Rogers. 1989. "The Impact of Alternative Forms of State Regulation of AT&T on Direct-Dial, Long-Distance Telephone Rates." Price-Cap Symposium, *Rand Journal of Economics* 20 (no. 3, Autumn): 437–453.

McPhail, T.L., and B.M. McPhail. 1985. *Canada's Future: Informatize or Disappear?* University of Calgary, Calgary.

**Google Scholar** 

Monson, C., and A. Larson. 1991. "Pricing and Incentives Under Price Ceiling Regulation." In *Price Cap and Incentive Regulation in Telecommunications*, edited by M. A. Einhorn. Boston: Kluwer.

**Google Scholar** 

Noam, E.M. 1991. "The Quality of Regulation in Regulating Quality: A Proposal for an Integrated Incentive Approach to Telephone Service Performance." In *Price Cap and Incentive Regulation and Telecommunications*, edited by M. A. Einhorn. Boston: Kluwer.

**Google Scholar** 

Panzar, J., and Postlewaite, A. 1984. "Sustainable Outlay Schedules." The Center for Mathematical Studies in Economics and Management Science. DP 626 S, Northwestern University.

Perrakis, S. 1983. "The Value of the Firm Under Regulation and the Theory of the Firm Under Uncertainty: An Integrated Approach." In *Economic Analysis of Telecommunications: Theory and Applications*, edited by L. Courville, A. de Fontenay, and R. Dobel. Amsterdam: North-Holland.

Google Scholar

Rees, R. Comments made at the May 1989 Conference, Held at McGill University.

Rheaume, G.C. 1983. "Welfare Optimal Subsidy-Free Prices Under a Regulated

Monopoly." In Economic Analysis of Telecommunications: Theory and Applications, edited by L. Courville, A. de Fontenay, and R. Dobel. Amsterdam: North-Holland.

**Google Scholar** 

Sappington, D. 1980. "Strategic Firm Behavior Under a Dynamic Regulatory Adjustment Process." *Bell Journal of Economics* 11: 360–372.

**Google Scholar** 

Sappington, D., and Sibley, D.S. 1988. "Regulating Without Cost Information: The Incremental Surplus Subsidy Scheme." *International Economic Review* 29:297–306.

**Google Scholar** 

Schmalensee, R. 1989. "Good regulatory Regimes." Price-Cap Symposium, *Rand Journal of Economics* 20 (no. 3, Autumn): 417–436.

Google Scholar

Selwyn, L., and F. Clottes. 1991. "Considerations and Alternatives for Adapting PC Regulation to Gaz Metropolitain Inc." Prepared for the Industrial Gas Users Association. Regie du Gaz Naturel, Quebec #R-3173-89.

Sibley, D. 1989. "Asymmetric information, Incentives and Price-Cap Regulation." Price-Cap Symposium, *Rand Journal of Economics* 20 (no. 3, Autumn): 392–404.

**Google Scholar** 

Spulber, D. 1989. Regulation and Markets. Cambridge, Massachusetts: MIT Press.

Google Scholar

Tirole, J. 1988. The Theory of Industrial Organization. Cambridge, Mass: MIT Press.

**Google Scholar** 

Tullock, G. 1975. "The Transitional Gains Trap." *Bell Journal of Economics* 6 (no.2, Autumn): 67–68.

**Google Scholar** 

Vickers, J., and G. Yarrow. 1988. *Privatization: An Economic Analysis*. Cambridge, Massachusetts and London, England: MIT Press.

**Google Scholar** 

Vogelsang, I. 1989. "Price-Cap Regulation of Telecommunications Services: A Long-Run Approach." In *Deregulation and Diversification of Utilities*, edited by Michael A. Crew. Boston: Kluwer Academic Publishers.

Google Scholar

Vogelsang, I. 1990. "Optional Two-Part Tariffs Constrained by Price-Caps." *Economic Letters* 33: 287–292.

**Google Scholar** 

Vogelsang, I., and J. Finsinger. 1979. "A Regulatory Adjustment Process for Optimal Pricing by Multiproduct Monopoly Firms." *Bell Journal of Economics* 10:157–171.

Google Scholar

Waverman, L. 1989. "U.S. Interexchange Competition." In *Changing the Rules:* Technological Change, International Competition and Regulation in

Communications, edited by R.W. Crandall and K. Flamm. Washington: Brookings Institution, 1989.

**Google Scholar** 

### **Author information**

#### **Authors and Affiliations**

Department of Applied Economics, Université Laval, G1K 7P4, Québec, Canada

Catherine Liston

# Rights and permissions

Reprints and permissions

## About this article

### Cite this article

Liston, C. Price-cap versus rate-of-return regulation. *J Regul Econ* **5**, 25–48 (1993). https://doi.org/10.1007/BF01066312

Issue Date

March 1993

DOI

https://doi.org/10.1007/BF01066312

# **Keywords**

**Recent Literature** 

**Public Finance** 

**Technological Change** 

**Industrial Organization** 

**Information Requirement** 

| Search                      |   |
|-----------------------------|---|
| Search by keyword or author |   |
|                             |   |
|                             | Q |
| Navigation                  |   |
| Find a journal              |   |
| Publish with us             |   |
| Track your research         |   |
|                             |   |
|                             |   |
|                             |   |
|                             |   |