

This Week's Citation Classic

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Leibenstein H. Allocative efficiency vs. "X-efficiency."
Amer. Econ. Rev. 56:392-415, 1966.

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X-efficiency theory challenges the maximization postulate of standard economic theory. This paper shows that X-inefficiency is, at times, as much as 30 times greater than allocative inefficiency and suggests reasons for the existence of X-inefficiency—i.e., (a) incomplete employment contracts, (b) discretionary effort, and (c) nonmaximization of profits. [The *Social Sciences Citation Index*® (SSCI)® indicates that this paper has been cited in over 270 publications since 1966. This paper is the 4th most cited in this journal, 1969-80.]

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"X-efficiency theory is concerned with the underutilization of resources available. It seems appropriate that my work began as a consequence of the availability of underutilized research assistance. We, my assistant and I, investigated a body of literature that was normally overlooked by economists—literature containing direct or indirect reports of management consultants or technical aid teams operating in various parts of the world. We found that, with a fairly high degree of consistency, these teams reported instances in which labor, machinery, or raw materials were either not used to their full capacity, or were used in ex-

tremely wasteful ways. They reported that managers of business enterprises, presumably reasonable men, often had apparently costless improvements suggested to them, yet the improvements were never introduced. This behavior clearly contradicted standard economic theory, which holds that enterprises minimize costs. I felt the need to examine, measure, and explain this phenomenon.

"I think I can guess at some reasons for the popularity of this article. First, it makes a basic and simple point that deviates from conventional thinking in the field. Second, the point is backed up by a lot of data from widely varying sources. Finally, ideas are presented in relatively simple form making it easily understood by students at various levels. In the subsequent decade and a half I have written a number of papers and three books spelling out X-efficiency theory, its applications, and the circumstances under which X-inefficiency would be greater or smaller.^{1,3}

"While the initial article was easily published, later related articles introducing an important postulate—the 'partial non-maximization' postulate—proved to be highly controversial.^{4,7} This last was frequently resisted by referees. Economists generally resist the relaxation of the maximization postulate.

"My experience has been that while non-economists find it difficult to accept the notion that people *always* do as well as they can, economists seem to feel equally strongly that maximization is the essential postulate for economic theorizing.³ In recent years there has been a gradual, if slight, increase in tolerance toward alternative postulates.⁴ Needless to say, I look upon this movement as healthy, and a necessary one for any developing science."

1. Leibenstein H. *Beyond economic man: a new foundation for economics*. Cambridge, MA: Harvard University Press, 1976. 297 p.
2. ———. *General X-efficiency theory and economic development*. London: Oxford University Press, 1978. 189 p.
3. ———. *Inflation, income distribution, and X-efficiency theory*. London: Croom Helm, 1980. 122 p.
4. ———. Aspects of the X-efficiency theory of the firm. *Bell J. Econ.* 6:580-606, 1975.
5. ———. A branch of economics is missing: micro-micro theory. *J. Econ. Lit.* 17:477-502, 1979.
6. ———. On bullseye painting economics. *J. Post Keynesian Econ.* 4:460-5, 1982.
7. ———. The prisoners' dilemma in the invisible hand. *Amer. Econ. Rev.* In press, 1982.