THEORIES OF COMPETITION AND MARKET PERFORMANCE

MULTIMARKET COMPETITION AND THE SOURCE OF POTENTIAL ENTRY

BY

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1 STATIC VERSUS DYNAMIC EFFICIENCY

The theory of industrial organization (henceforth IO) studies business policy and market performance under specific competitive conditions. The key contribution of IO is the theory of competition. The structure-conduct-performance paradigm describes the (reciprocal) causalities between competitive conditions (structure), business policy (conduct) and market welfare (performance). The welfare debate focuses on the trade-off between static and dynamic efficiency of partial market results. Static efficiency of market behavior refers to (minimum) average cost pricing, whereas dynamic efficiency is concerned with the fact that, for instance, ‘new products may be introduced, new qualities of existing products may be developed, new methods of production may be ventured, new forms of industrial organization, financing, or tackling risk may be developed’ (Kirzner 1985, p. 30).

The central proposition is Schumpeter’s well-known argument that perfect competition undermines the firms’ incentives to introduce dynamic economies of market behavior. The point is that ‘the fundamental impulse that sets and keeps the capitalist engine in motion comes from the new consumers’ goods, the new methods of production of transportation, the new markets, the new forms of industrial organization that capitalist enterprise creates. ... A system – any system, economic or other – that at every point of time fully utilizes its possibilities to the best advantage may yet in the long run be inferior to a system that does so at no given point of time, because the latter’s failure to do so may

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1 The efficiency terminology is often used in welfare-theoretic arguments in the theory of industrial organization. It is, for example, predominant in Kamien and Schwartz’ (1982) excellent survey of the economics of innovation. However, the reader must be aware of the fact that efficiency in the theory of industrial organization has a meaning which is narrower than the one in welfare (particularly general equilibrium) economics (Tirole 1988, pp. 11–12).
be a condition for the level or speed of long-run performance. ... But in capitalist reality, as distinguished from its textbook picture, it is not that kind of [price] competition which counts but the competition among firms from the new technology, the new source of supply, the new type of organization (the largest-scale unit of control for instance) – competition which commands a decisive cost or quality advantage and which strikes not at the margins of the profits but at their foundations and their very lives. ... It is hardly necessary to point out that competition of the kind we now have in mind acts not only when in being but also when it is merely an ever-present threat. It disciplines before it attacks' (Schumpeter 1943, pp. 83–85). This is the static-dynamic efficiency trade-off, which serves prominently in the literature on R&D and innovation. That is, 'under monopoly, innovation occurs but at a slower pace than is socially optimal, whereas under perfect competition there is none at all. This of course leads to the consideration of the trade-off between perfect competition and its static efficiency properties and monopoly, which lacks static efficiency but allows for innovation' (Kamien and Schwartz 1982, p. 191).

This paper serves a twofold purpose. First, the theoretical literature on the static-dynamic efficiency trade-off is reviewed and classified by distinguishing three types of competition: pure-contestability, non-contestability and quasi-contestability (Van Witteloostuijn 1990a). Second, a microfoundation of quasi-contestability as a welfare-theoretic yardstick for the evaluation of market performance is presented: a quest for favorable market conditions identifies sources of potential entry that impose a discipline on incumbent firms' conduct. Note that the paper's terminology is standard in IO: the argument is framed in terms of game theory (Shapiro 1989, pp. 125–126). The frame of reference is a one (static) or two-staged (dynamic) noncooperative game: in the first stage (ex ante) firms may decide on sunk investment; in the second stage (ex post) rivals compete for market share. The equilibrium concepts are Nash for static and subgame perfection for dynamic games (Rasmusen 1989, pp. 32 and 85, respectively). The paper is organized as follows. Section 2 reviews and classifies theories of competition. Section 3 focuses on static efficiency by investigating the role of sources of potential competition in disciplining pricing policies of incumbent firms. Section 4 studies dynamic efficiency by analyzing entry-deterring investment strategies of incumbent firms in the face of a credible entry threat. Section 5 summarizes the argument.

2 THEORIES OF COMPETITION

2.1 Pure-contestability

2.1.1 Literature
The well-established theory of statically efficient rivalry is perfect competition. A large number of price-taking producers of a uniform product induces average