The use of entry deterrence strategies

The use of entry deterrence strategies by market incumbents has long been a topic of interest in industrial organization. Many models in this setting emphasize the use of specific ways as the established firm's strategic tool for deterring entry.

This paper studies the constrained firm's ability to deter entry into its market. We consider a scenario where a firm is self has the capability to pursue successfully strategies that will prevent the entry of new firms into its market. This means that we will not examine the regulations which government legislate to make entry more difficulty or even impossible, albeit a government may make competition illegal and a statutory monopoly be established.

There are a lot of different ways how an incumbent firm reacts when facing the threat of entry. Actually, incumbents pursue so many different strategies to seemingly the same problem, namely threat of entry. In order to enter in the market entrant has to deal with some kind of hurdles-difficulties; Barriers to entry are those factors that allow incumbents to earn positive economic profits, while making it unprofitable for newcomers to enter the industry. Barriers to entry may be structural or strategic. Structural entry barriers result when the incumbent has natural cost or marketing advantages (as advertising, research and development, distributor and supplier arguments and so on) or benefits from favourable regulations (such as government regulations). Strategic entry barriers result when the incumbent aggressively deters entry. Assuming that the incumbent monopolist's market is not perfectly contestable, it may expect to reap additional profits if it can keep out entrants. We discuss three ways in which it might do so: Entry-deterring strategies may include limit pricing, predatory pricing, and capacity expansion.

The first form of strategy that a firm can expand to successfully defer the entrance of a new firm in the market is the limit pricing, which may be expressed by two types: the contestable limit pricing and the strategic limit pricing. By the time the incumbent prices lower than the entrant's marginal cost and also that present price is in accordance with the market demand then contestable limit pricing is expanded, whereas the incumbent has excess capacity and a marginal cost advantage over entrants. While strategic limit pricing occurs when contestable limit pricing is insufficient. In that way the incumbent sets such a lower price as it may be unable to meet market demand and if this may not be enough to keep the entrant out of the market, the incumbent will have to sacrifice profits in order to assure entrant's exclusion. The limit pricing will be clearer as an entry-deterring strategy factor by stating the rule of switching costs first and then examining entrant's reactions in each incumbent's movements to try to bar any new firm's existence from the market.

In a low growth market, switching costs deter entry as the incumbent has the majority of the market covered and its profit margin equals the switching cost. Firms will have to run a loss to enter the market and it can be assumed that the incumbent will react aggressively to the new entrants. In a market with above average growth middle range switching costs are the most conducive to entry. Low switching costs deter entry, as firms will have to run a loss in the initial entry period. Profits are lower as there is more less scope to exploit locked in consumers. Incumbents are therefore more likely to invest in order to attract new customers that are reacting aggressively to entrants. With high switching costs, firms earn good profit margins and may be willing to forego these temporarily in order to preserve their monopoly and so are hostile to entrants. Switching costs help explain limit pricing. In the first period when the firm is a monopolist, they charge a price below marginal cost so the market is fully covered. Firms don't enter as they feel the incumbent will continue this strategy. Even if the incumbent raises price to make a profit, the potential entrant feels the incumbent will revert to this strategy if they enter, so zero profits will be earned. This is a rational belief as a firm invests in excess capacity as a signal of strategic behaviour. It is sending a message to potential entrants that if they enter they will make it extremely difficult for the entrant to gain market share.

From above it is obvious that limit pricing involves charging prices below the monopoly price in order to make entry appear unattractive, in other words to limit new firms' entry. A low price would discourage entry if prices had a commitment value. But actually they do not, because prices can be changed quickly. Hence if a potential entrant has complete information about the incumbent, limit pricing would be useless. But if the incumbent's costs are private information the price in a preentry period can be a signal about the incumbent's costs and hence limit pricing may discourage entry by reducing expected post-entry profits. Incomplete information and resulting limit pricing do not necessarily imply a lower entry rate than with complete information. E. g. in a separating equilibrium, the entrant is perfectly informed about the incumbent's cost (but a low cost incumbent might still engage in limit pricing to separate himself from the high cost incumbent).

Assume here two-sided incomplete information, both incumbent and entrant does not know the other’s cost.

Since the incumbent’s preentry pricing does not influence the entrant’s expectations about postentry competition, in accordance with the above analysis, limit pricing fails to achieve its targets (always from incumbent’s perspective). It is helpful to analyse another strategy which successfully prevent the entry of new firms into the market; predatory pricing. Predatory pricing is very similar to limit pricing, since the dominant incumbent charges low prices to lead the current competitors out of the market and additionally these low prices can discourage potential entrants to be introduced in the market. The expectation of the dominant incumbent, conducting predatory pricing strategy, is being focused on the long term profit rising, as by the time the prospective entrants will opt out of the market, the incumbent’s diminished profits or even the volitional losses will recover later through future monopoly advantage.

Predatory pricing is a controversial issue. On one hand, price cuts can be used as a means to exclude rival firms and increase future market power. On the other hand, price cuts are the bread-and-butter of market competition. This may happen either as a result of incumbent’s irrational price setting or by analysis’s failure to capture important ingredients of their strategies. The established firms ought to be very careful about their predatory actions, aiming to successfully prevent potential rivals’ entrance into the market, as any false step would be harmful and eventually would have the right opposite’s outcome than initially had been methodized.

Predatory pricing strategy will be profitable for the incumbent firm merely when it has accurate knowledge about its costs' levels and the market demand as well. Definitely entrant must lack that information. Predatory pricing in that case is based on dynamic effects through the firms' profit functions (either through demand or through costs). In respect of cost's issue can be stated that the entrant is preferable to have less cognition about the incumbent's costs versus the established firm, having mastery of its own costs, leaks knowingly information that has low cost and therefore implying that has margins to charge its products at very low prices discouraging every entrant to participate into a market with eliminate profitability. By implication to the costs' levels the nescience of market's demand will guide to the same results. Apparently above assumptions of uncertainty are crucial and both make predation rational as from entrant perspective the price limit depicts that incumbent's costs or market demand is low and hence have deterrent effect on firm's entry into the market.

Except uncertainty there is another reason why predatory pricing is a plausible strategy. That is asymmetry between incumbent and entrant. By repeatedly fighting rivals with low prices, the incumbent increases its reputation for toughness; and thus encourages exit and/or discourages future entry. Firm having very low cost, or might dislike competition, even to the point of sacrificing profits to remain a monopolist, have every reason to become tough, especially since the present incumbent firm has dependable information that the entrant is uncertain about whether the incumbent would slash prices or not. Alternatively, if the entrant is not sure about the incumbent's costs, motives or future plans, then the latter's low prices signal that the incumbent's costs are low too, and so are the entrant's long term prospects. It is obvious that in both ways the incumbent establishes a reputation for toughness (Milgrom and Roberts).

Concluding, predatory pricing is indeed a risky strategy. The firm involved may incur high up-front losses, with some evidence to the incumbent for future gains from monopolization. The strategy will only be profitable and the predatory pricing is unlikely to succeed merely if the incumbent lowers its price below cost and maintains it there until equally efficient competitors are forced to incur unsustainable losses and exit the market. The established firm then raises its price to a monopoly level in order to recoup its lost profits.

Another strategy tool which can be used from the established firms is by holding excess capacity which may also signal unfavourable postentry conditions to new entrants. Firms hold more capacity than they use for several reasons. For strategic purposes firms use it to blockade entry by altering potential entrants' forecasts of postentry competition. Holding excess capacity may signal the incumbent's willingness to slash prices if entry occurs. This means that prices are never cut, and so the risk of reverse results in response to limit or predatory pricing never occurs. Alternatively excess capacity, acting as a barrier to entry, shifts the risk-return expectations of potential entrants in such degree as to divert these entrants' investments into other industries. Excess capacity may deter an entrant with full information about the incumbent's costs and strategic direction (in contrast with limit and predatory pricing). The incumbent's excess capacity can affect the entrant’s forecasts of post-entry competition, which depend on each firm’s costs and capabilities.

Investment in additional capacity can be a credible commitment to deter entry. Critical that the capacity investment is sunk: if the incumbent could sell its capacity for the full purchase price, then, once entry had occurred, better off selling any capacity. The entrant, looking forward and reasoning backwards, would realise this and enter no matter how much capacity the incumbent held. Holding excess capacity may also signal unfavourable postentry conditions to new entrants and will not arouse antitrust suspicions. May serve as a credible commitment to expand output and drop price should entry occur – especially if capacity investment is sunk and the incumbent firm is inflexible in the output it produces.

We have analyzed the strategic use of entry deterrence of an established firm and the entrant’s reactions in the market. The incumbent influences entrant’s expectations for market profitability by choosing first the prices’ level before the entrant does. We also show the three strategic methods which the incumbent firm is able to utilize in order to deter or blockade potential firm’s entrance. Also was mentioned at which, and to what extent these strategies are deliberate (by the dominant firm) of driving competitors out of the market by setting very low prices or selling below the firm’s incremental costs of producing output and hence to successfully increased its market power or best to dominate into its market. Moreover we observe the route which the incumbent followed to successfully drive out existing competitors and deterred entry of new firms, and furthermore when he could rose prices and earned higher profits.