THE ECONOMIC REASONS FOR PRICE AND ENTRY REGULATION OF TAXICABS

A Rejoinder

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In two articles in this Journal (Shreiber, 1975, 1977) I argued that in unregulated taxicab markets, where cruising is the principal mode of operation and where there are no operators that control a substantial share of the market, fares will tend to be high, waiting time for cabs short, and price competition non-existent.

Mr David Williams (1980) criticises the practicability of my analysis as well as my conclusions.

TAXI STANDS AND TELEPHONE BOOKING

Mr Williams's first argument is that the pure cruising taxi market which I assumed in constructing my model is not representative of real world markets. In support of his contention Mr Williams cites Melbourne, where only one-sixth of all taxi trips are generated by cruising, while the rest originate from taxi stands and telephone orders. Mr Williams also points out correctly that in low-density areas cruising will not be an efficient method of operation and a system of telephone booking is therefore more likely to be established. Also he correctly points out that in railway stations, airports and similar places, where many passengers congregate, a taxi stand is likely to be formed.

The model I presented is intended to explain the determination of price and waiting time in taxi markets where cruising is the principal mode of operation. Such markets do exist, and New York City is an example. The assumption of pure cruising was laid down only to facilitate simple and unambiguous presentation of the model, even though I realised, of course, that pure cruising markets do not exist. The model is not applicable to those markets (e.g. Melbourne) where telephone booking and taxi stands are the main methods of operation.

Mr Williams in his comment fails to realise that not all taxicab markets have the same characteristics, and a method which is efficient in one market is not necessarily appropriate for another market. He criticises my model by relying on what is happening in Melbourne and Los Angeles, and disregards the fact that my analysis

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was based on the New York City taxi market and is applicable only to that and similar markets.

In New York City most of the taxicab business takes place in Manhattan. In a traffic count, conducted by the New York City Taxi and Limousine Commission (1971a, p. 320 at p. 336), 6,222 out of 8,644 cabs counted at a given time were operating in Manhattan. Most of the trips in New York City are generated through cruising. In 1971 only 1,465 out of nearly 12,000 cabs were equipped with two-way radios, and even they installed the radios more as a safety device to report robberies than as a method of obtaining telephone booking (ibid, p. 335). As to taxi stands, in interviews with taxi drivers conducted in 1971 about two-thirds of those questioned said they did not use taxi stands at all (N.Y. City Taxi and Limousine Commission, 1971b, p. 348 at p. 353). Also the number of stands in New York declined by 72.4% between 1951 and 1974.

The main reason why cruising is the principal method of operation in New York City is the very high density of population. This method, which works very well in New York, is not suitable for cities with low density of population (e.g. Los Angeles).

It is true that, even in markets where cruising is the principal source of business, some of the trips do nevertheless originate from taxi stands and telephone orders. But this does not alter my conclusion that price competition among operators is unlikely in such markets. My reasons are as follows:

First, most taxi riders use cabs because they are quicker than mass transit and because they take them from the point of origin to the point of destination. It is unlikely that passengers will purposely walk to a stand to shop for prices instead of hailing a cab. To do so would frustrate the purpose of taking a cab.

Second, to maintain order and prevent violence among drivers it is preferable for passengers to be required to take the first cab in a taxi stand queue, rather than be allowed to choose the cheapest. Third, since most of the business is generated from cruising it will not pay for an individual cab owner to reduce his prices across the board just to gain more business on the rare occasions when he uses taxi stands.

As to telephone booking, this is definitely not a substitute to hailing a cab. Ordering a cab takes time (calling and waiting for the cab to come), and it necessitates the use of a telephone (which is not always available, and is not costless). Moreover, as I pointed out in my previous paper (Shreiber, 1977), since cab operators know that lowering the price might raise the telephone business but would not affect their cruising operation, it is more reasonable to expect them to give discounts to telephone orders than to lower prices across the board. In other words, the incentive to obtain more telephone orders is not likely to induce more competition in the cruising market.

COMPETITION WITH MASS TRANSIT AND THE ENTRY OF LARGE FLEET OWNERS

Mr Williams's second argument is that competition with mass transit will force taxi fares down. This, I believe, is incorrect. First, the cross elasticity of demand between cabs and mass transit is very low. In New York City the Taxi and Limousine Commission (1971a, p. 336) concluded that the cross elasticity was actually zero. Moreover, I assumed a market which consisted of only small independent operators. An individual operator cannot expect to lure passengers away from mass transit if he,
working alone, reduces the fare. He therefore will have no incentive to do so. Reduction of fare to compete with mass transit might occur only as a result of organised action by a relatively large number of taxi operators.

Mr Williams’s last argument is that when prices are high and cab occupancy is low large fleet operator(s) are likely to enter the market and reduce prices. He further argues that these fleet operator(s), after establishing a monopoly (or oligopoly), will fix prices at a low level to prevent the entrance of other smaller operators.

In a cruising taxicab market, size does not carry with it economies of scale. In New York City, for example, most of the large fleets went out of business. Any large operator who enters the market when fares are high is liable to lose money at the outset, and can only hope to cover his costs in the long run.

Assuming inelastic demand, the entrance of large operator(s) who will cut prices will lead to reduction of total industry revenue. Since equilibrium in a cruising taxi market is achieved when cabs just cover their cost, the reduction in total revenue coupled with more cabs entering the market must result in overall loss to the industry. In the long run exiting of cabs, or a rise in fare to more than it was originally, will restore normal profits.

Large operators who understand the economic reality of the cruising taxi market are unlikely to enter the market in order to compete when fares are high. Still one can visualise a scenario of large naive operator(s) who have sufficient financial resources to enable them to reduce fares, incur losses and drive all other operators out of the market. The question still remains what will be the strategy of such operator(s) once they gain a monopoly or oligopoly position. My guess is that they will establish a combination of fare and cab occupancy that will yield to them above-normal profits. Their ability to maintain such a combination is not likely to be long-lasting, because the profits will induce individual cabs to enter the market. Still, the large operators will enjoy those profits until they are chipped away by the newcomers, and it is better to have profits for a while than to have none at all.

REFERENCES


