

TAXI!! REINVIGORATING COMPETITION IN THE TAXI MARKET

Jason Soon

Ancedotal evidence suggests that there is room for improvement in the state of taxi services in NSW. This is backed up by a survey conducted in March 1998 by the NSW Transport Department. While the survey found mostly positive comments relating to driver appearance, car cleanliness and driver politeness, performance lagged with respect to waiting times, the driver's knowledge of locations and English proficiency.

As of March 1999, there were 5683 taxi operators licensed in NSW; 4473 of these operate in the Sydney Metropolitan area. By issuing new licenses recently, the State Government acknowledged that there was an undersupply of taxi services. From August 1998, 100 additional 'peak availability' taxi licenses, with restricted operating conditions were issued to address the shortage of taxis in peak hours. An extra 400 wheelchair-accessible licenses were also released at a rate of 20 per month. The new licenses were issued at \$36,000, well below the then market rate of \$270,000 (*The Daily Telegraph*, 6 November 1998, p. 17). Arguably, more fundamental reforms are needed to prepare for the Olympics and service the growing population of NSW.

Taxi Regulation in NSW

Though the details of taxi regulations vary from one jurisdiction to another, they all take the same form. They involve regulation of entry, that is, the number of taxis; quality controls; and control of fares and/or fare setting procedures.

In NSW, taxi operators must pass background checks to ensure they are of good character and are fit and proper persons before they are licensed. They must meet government standards on financial viability, safety of passengers and the public, and vehicle maintenance. Operators must also ensure that taxis under their control are affiliated with an authorised Taxi Service Radio Communication Network, and are available for hire at all times as required by the Network.

Background checks also apply to taxi drivers. They must pass a medical fitness test and checks on their driving record. Legislative provisions regulate appropriate behaviour towards passengers, presentation of the taxicab and Network Service Requirements. A new taxi driver curriculum drawing on standards from the hospitality industry and requiring comprehensive knowledge of the road network recently received state accreditation in NSW.

All States and Territories regulate taxi fares. In NSW, the Director General of the Transport Department has the discretion to determine fares and charges for the taxi and hire car industries. The taxi industry makes a submission to the Department annually for a fare increase. The Department then analyses the proposal and reaches a decision based on industry and customer needs. Approved increases are broadly in line with changes in inflation.

Some quality control regulations are arguably justified to facilitate a properly functioning transit market and protect consumer interests. These include checks on the backgrounds of drivers, health checks on drivers and safety checks on taxi vehicles.

Some regulations are claimed to prevent abuse of the market power conferred on taxi industry incumbents by the above regulations. This is true of the requirement for taxis to belong to an authorised Radio Communication Network, the regulation of maximum taxi fares and the prescription of rigorous safety and driver knowledge standards. With more open entry, some of these regulations would be unnecessary. Taxi companies of different sorts would enter the market and serve market niches with varied requirements, advertising their expertise accordingly.

Jason Soon is Assistant Editor of *Policy*. This article is an extract from an *Issue Analysis* of the same title recently published by *The Centre for Independent Studies*.

Fare regulation is a particularly complicated issue. As long as restrictions on the number of taxis remain, the setting of maximum fares is needed to prevent abuse of market power. At the same time, fare regulation is subject to the same problems as price fixing in any other industry. It frustrates the ability of prices to properly reflect information about costs, demand and supply, which may be particular to each segment of the market. For example, rural taxi operators have argued that the standard fare for the average three kilometre trip endorsed by the NSW Taxi Council fails to reflect their costs (*Business Sydney*, 14 August 1998, p.16).

Regulation and its Effects on the Taxi Market in Australia

Table 1 shows the number of taxis per 10,000 people in each State and Territory in 1991 and 1995.

Table 1: Number of Taxis per 10,000 People

State/ Terr.	NSW	Vic	Qld	SA	WA	Tas	NT	ACT
1991	9.2	9.9	8.2	4.1	7.4	12.1	7.8	6.3
1995	8.6	8.5	7.9	7.4	7.2	12.9	6.9	6.9

Source: Australian Bureau of Statistics (1997)

The low ratio of taxis to the population in all Australian States and Territories is evident from Table 1. Figures for 1999 supplied by the Victorian Taxi Directorate and the NSW Transport Department reveal that there are 9.62

taxis per 10,000 people in NSW and 8.36 in Victoria. These compare poorly with New Zealand, where, for example, in Wellington, there are 24.3 taxis per 10,000 people.

This undersupply has manifested itself in many ways. South Australia has had a recurring problem of keeping up with demands during the Christmas holiday period. In Victoria, the Victorian Taxi Association claimed that the number of new taxi drivers per month had decreased to 200 and that this fell short of demand (*Herald Sun*, 29 July 1997, p.2).

The general upward trend in taxi license plate values in most jurisdictions shown by Table 2, after adjusting for inflation, suggests that taxi operators have been successful in increasing barriers to entry. Increased barriers to entry mean each entrant into the market needs to charge a higher fare in order to recoup her investment and it also means the supply of taxis is likely to fall short of demand. Thus, high license values are prima facie evidence that fares are higher than would prevail in a freer market. A 1997 report by Access Economics found that a Sydney taxi license plate was the third best investment to make, after thoroughbred horses and wine (*The Australian*, 17 September 1997, p.3).

The effect of taxi regulations in inflating fares would fall disproportionately heavily, as do most other regulations, on the poorest in the community (see Table

Table 2: Cost of Taxi Licenses in Each State (\$)*

STATE	1991	1992	1993	1994	1995	1997	1998
NSW	199,161	224,418	222,648	218,508	234,925	284,197	260,000
Vic	133,918	145,079	133,589	161,696	187,940	263,897	265,000
Qld	171,690	195,318	195,931	192,287	185,852	258,822	267,000
SA	104,159	125,810	140,268	152,955	148,264	157,323	158,000
WA	165,967	156,866	155,854	158,418	182,719	233,447	210,000
Tas	66,387	64,605	74,587	71,015	75,176	101,499	100,000
ACT	234,643	260,688	317,274	311,374	250,587	243,597	280,000
NT	148,798	168,881	189,251	185,732	229,704	248,672	230,000

* License values have been adjusted for inflation using the December 1998 quarterly index of 121.9. Indexes for years before 1998 have been constructed by taking averages of quarterly indexes. Figures have been rounded to the nearest unit.

Sources: Australian Taxi Industry Association (1999);
Consumer Price Index Australia 1991 to 1998, 6401.0.

Table 3: 1993-94 Taxi fare expenditures as percentage of average weekly household incomes

Lowest quintile	Second quintile	Third quintile	Fourth quintile	Highest quintile
0.43%	0.29%	0.19%	0.13%	0.18%

Source: Australian Bureau of Statistics (1996). Calculations have been rounded down to two decimal places.

*The lowest quintile refers to the lowest 20 per cent of the population in terms of income. Thus the second quintile refers to the next 20 per cent of the population above the lowest quintile, and so on.

3). This is because many low-income people cannot afford cars and may have to use taxis as a substitute, particularly during emergency situations.

Taxi regulations also have less tangible but equally important effects in stifling incentives for innovation to serve particular markets. For example in 1996, the Victorian Taxi Directorate rejected an application for a taxi license by women who wanted to establish a women-only driver service, despite submissions by women's groups that such a service would help to alleviate safety fears of female passengers (*The Age*, 10 September 1996, p.5).

How to Deregulate: Regulation versus Certification

Concerns addressed by quality controls can be tackled by government certification. That is, rather than requiring taxis to abide by certain standards, taxis operators who demonstrate compliance with desirable standards (such as those currently enforced by regulations) would earn the right to place a distinctive mark of government certification on their vehicles. Such a policy would alleviate information deficiencies alleged to be the cause of market failures.

A government-certified taxi system could coexist with a totally unregulated market for as many forms of passenger servicing vehicles as there are entrepreneurial possibilities. Consumers could decide whether to go for the safer option of taxis with certification or take their chances with unregulated taxis. The resulting choices would reflect consumer preferences for different combinations of price and quality.

The assumption that the resulting unregulated part of the market is likely to be a 'fly-by-night' and hence 'no go' area is open to question. In the absence of regulation, the market could, over time, evolve information devices that reduce the cost to consumers of monitoring quality and price if the adequate profit opportunities are there to be seized. These could take the form of private certification and brand identification through advertising.

By contrast, the costs of restricting taxi numbers are clear. Like any other supply restriction, controls reduce

the availability of taxis and lead to higher fares being charged than would be sustainable in a freer market.

The capacity to charge above-market fares is then reflected by increments in the market value of taxi licenses. The perversity of this situation is that these windfall capital gains only go to the original owner of the license plate. New owners, if they buy a license at the current market price, receive only a competitive rate of return from investments in taxi plates since they have to meet a high interest rate (actual or notional) to pay the inflated price for the plates. Furthermore, new owners now have a vested interest in raising barriers to entry to ensure a high rate of return from the investment. Owners also have a vested interest in keeping entry barriers high even where their plates were allocated below market rates because protection against new entrants will further increase their returns.

Competition in the Taxi Market

It has been argued that the taxi market differs significantly from other markets because it does not permit operators to sell to consumers at fixed locations. Thus, price comparisons are difficult (Schreiber 1975). It is argued that consumers tend to get the first vacant cab that passes.

On the seller's side, it is argued that any operators who cut their price may end up with lower revenues because of the low probability of a repeat purchase by people who predominantly hail for cabs.

It is also argued that the incentives for customers to search actively for a lower fare will decrease as the fare

**Concerns addressed by
quality controls can be
tackled by government
certification.**

risers. Thus fare increases will tend to be self-perpetuating. This will draw more taxis into the market and cause greater road congestion. Thus a deregulated taxi market might lead to too many taxis and fares which are too high.

These arguments make many questionable assumptions.

Firstly, assuming that competition usually works as described above, the conclusion that fares are likely to be too high says nothing about whether fares are in fact higher than in cases where the number of taxis are limited.

The conclusion that maximum fares should be set should also be resisted because this tends to hinder the entrepreneurial process by discouraging experimentation with different fare structures. In the absence of price regulations, some taxi owners might opt to service a luxury market by offering higher quality in return for price.

Secondly, how many taxis is 'too many' taxis? The benefits of having 'too many' taxis', such as greater availability and hence lower waiting time and greater convenience in bad weather has not been considered. If too many taxis lead to greater congestion, so do too many cars. Furthermore, the use of cars in congested areas may be discouraged if more taxis were available. Thus, the total number of vehicles used may decrease if there were more taxis.

Thirdly and most importantly, these arguments ignore many of the institutional devices which may be used to convey price information and feedback more efficiently between potential customers and sellers (Williams 1980a).

While many taxis are flagged down on the street, taxis also ply for business at taxi ranks and by phone orders. Taxi industry structures are likely to differ between States and it is difficult to predict how they would turn out in a deregulated market.

Taxi Ranks

Taxi ranks are usually located where there is high and consistent demand for taxis such as near airports and hotels. The consumer can choose whether to wait to hail down a taxi or walk to a taxi rank where he will find a taxi faster (Williams 1980a). This is likely to make price comparisons easier.

Three objections could be raised against the argument that taxi ranks enhance price competition.

The first is the prevalence of the convention of taking the first cab off the rank. But there is nothing inevitable about such a convention. Williams (1980a) reports that the first taxi ranks in Melbourne were known to have been places of eager bidding. Such bidding routinely takes place in Asian cities.

The second objection is that such conventions are desirable in order to avoid the escalation of bidding wars into physical fights over customers. If this concern is a valid one, there may be a case for enforcing this convention in the case of open ranks designated by the government.

However, a taxi company or a group of taxi companies could agree to set up ranks exclusive to their members. The space for such ranks could be set aside and sold by governments and made transferable. The members of the exclusive ranks could come to their own agreements as to what rules would maximise the return from their investments in these ranks.

There could then be competition between neighbouring ranks owned by different taxi companies. Participating companies could advertise their prices at these ranks.

The effects of competition could then trickle down to the 'flagged down' market.

Phone Booking

Price competition can also be facilitated through the phone booking market. This is because the phone booking taxi operator has a fixed selling location and is likely to have a clientele consisting of repeat purchasers who care about price. Sometimes a taxi operator may operate in both the phone booking market and the 'flagged down' market. In this case price competition in the former is likely to spill over into the latter so that even occasional users of taxis will benefit.

The significance of competitive pressures introduced by phone booking is powerfully confirmed by complaints made by the taxi industry as a whole against the hire car industry.

Even if customers in the 'flagged down' market care little about price, they are still likely to benefit from the

The significance of competitive pressures introduced by phone booking is powerfully confirmed by complaints made by the taxi industry as a whole against the hire car industry.

greater availability of cabs and reduced waiting times that would come from deregulation.

Theory and Reality: Consequences of Deregulation in Other Countries

Critics of deregulation usually cite the counterintuitive results of taxi deregulation researched by Teal and Berglund (1987) as evidence that theory fails to match reality. Teal and Berglund studied the impact of taxi deregulation in six American cities. They found that the size of the taxi market increased by at least 18 per cent in all the cities but taxi fares rose in real terms.

However, the reasons suggested by Teal and Berglund for the failure of deregulation to bring greater benefits are either inapplicable to Australia or have been superseded by technological developments (Gaunt and Black 1994).

For instance, they argued that high entry costs into the phone order market may have hindered price competition. Entry costs into the phone order market are less relevant today because of advances in mobile communications. The benefits of deregulation should thus be stronger today than when Teal and Berglund conducted their research. For instance, mobile phones have made taxi drivers less reliant on radio networks and many owners now work in small, informal networks. Findlay and Round (1994) estimate that between 10 and 20 per cent of major metropolitan areas taxis now have either fixed or handheld phones.

Teal and Berglund also argued that drivers' wages in the cities studied were already among the lowest in the labour force, so that even with deregulation there would have been little scope for cost reduction. However this may not be the case in Australia. In 1993, the then Industry Commission found that licensing added about 25 per cent to fares. Gaunt and Black (1996) calculated that regulation of the Brisbane taxi industry added an average of \$1.47 per taxi ride.

The Effects of Taxi Deregulation in New Zealand

New Zealand deregulated its taxi industry with the passing of the *Transport Services Licensing Act 1989*, effective from 1 November 1989.

The legislation removed quantitative controls on entry and fares. Taxis and limousines were defined as Small Passenger Vehicles and the owners of such vehicles were required to have a passenger service license. The holders of these licenses could operate any number of vehicles they wanted.

Fares were to be set by individual taxi organisations with the maximum fare registered with the Transport Department, calibrated on the taximeter, and displayed both inside and outside the taxi.

All those holding a license on 1 November 1989 were automatically issued with a passenger service license. Issue of licenses for new applicants was conditional on passing a 'fit and proper person' test and obtaining a Certificate of Knowledge after successful completion of a test of knowledge and understanding of laws and safety requirements. License holders were still required to belong to an approved taxi organisation, one which provides a 24 hour, seven days a week service with a radio booking and communications system.

**In New Zealand, customers
have benefited from the
expanded market through
reduced waiting times and
the increased range of
services available.**

Drivers also have to be licensed and are subject to checks on their criminal and driving record, passing a map reading test, first aid certificate test and an annual medical exam.

A recent study found that of the 28 taxi companies operating in the largest taxi market in New Zealand (Auckland) on May 1994, only nine existed before October 1989 (Morrison 1997). The number of taxi vehicles in the Wellington regional market increased from 454 in October 1989 to 932 in November 1994.

The growth in the number of taxi licenses has outpaced population growth in Wellington, leading to the numbers of cabs per 10,000 increasing from 14.9 to 24.3.

The Wellington market also showed evidence of service innovation. Many new specialised taxi type services sprung up, including taxi vans and executive cabs. There is also a new taxi charge credit system and more advertising on cabs. Some taxi companies have also begun tendering for public bus routes.

Anecdotal evidence suggests that the taxi market has been able to sustain growth that outpaces population growth because the greater availability of taxis and improved ease of payment has expanded the use of taxis. Customers have benefited from the expanded market through reduced waiting times and the increased range of services available.

The New Zealand Transport Department found that taxi fares for the majority of companies decreased by as much as 10 per cent from 1989 to 1995. In the major metropolitan areas of Auckland, Wellington, Christchurch and Dunedin, 71 per cent of taxi companies reduced their flagfall and 77 per cent reduced other fares.

The behavioural changes following deregulation were also significant. It was found that after deregulation, most empty taxis waited at taxi stands (Morrison 1997). Taxi stands are more likely to facilitate comparison of prices and information gathering, at least for future use. There was also evidence of voluntary industry standard-setting and differentiation. The New Zealand Taxi Federation, representing about 50 per cent of the taxi industry, set higher standards for its members (New Zealand Ministry of Transport 1999).

Morrison also highlights an often-neglected benefit of taxi deregulation – it opened up new employment opportunities for those without formal qualifications.

The New Zealand experience suggests that there is little cause for alarm on safety grounds. Between 1991 and 1993, 11 drivers were disqualified for sexual and/or violent offences, but nine of these were in the industry prior to deregulation (New Zealand Ministry of Transport 1999).

Compensating for Deregulation?

The issue of compensation invariably follows the call to deregulate taxi licensing. It is clear that the scarcity value of licenses held by incumbents will fall with the removal of quantity restrictions on taxi licensing.

The compensation issue is both a moral and practical one.

Morally it is argued that in the interests of equity and fairness, license holders should be compensated for the loss of their scarcity rents because government policy has disproportionately disadvantaged them as a group. Alternatively it is argued that the licenseholders obtained

their taxi license plates in the legitimate expectation that current arrangements would continue, otherwise they would have invested elsewhere and possibly made better returns.

The moral case for compensation is fraught with difficulties. It could be argued that the high return licenseholders get for taxi licenses already compensate for high risk, the major risk being that of deregulation. Consequently there is then no justification for compensation.

The practical case for compensation is a bit harder to avoid. Reform is less likely to be disruptive if affected interests can be 'bought off'. Though New Zealand succeeded in deregulating its taxi industry without any compensation, it did so in an extraordinary period when

many other reforms took place.

However, full compensation may not be a desirable option given that taxi license values reflect the present value of future excess profits. This means that full compensation would entail the benefits of deregulation being offset by payments presumably funded by taxpayers, not all of whom would be taxi users. This means that some taxpayers would be worse off than before.

An Alternative to Full Deregulation

If the route to full deregulation is too difficult for governments to take, the next best option is to introduce a competitor to the taxi system in the form of a 'mini-cab' system such as operates in the United Kingdom. 'Mini-cabs' and their drivers are certified to ensure safety. They may be any size. They cannot ply for trade on the street, being restricted to the phone-order business. In NSW, the lead-up to the Sydney Olympics indicates that there is an urgent need for improved transport options such as may be provided by this proposal.

The conditions for certifying a 'mini-cab' could be significantly less strict than those for current taxis. They could be restricted to minimum necessary safety and quality control regulations such as driver checks, and checks on the condition of the motor vehicles, and fare-setting procedures such as a requirement that the fare be posted outside the mini-cab. Currently operating taxis would have the sole right to pick up fares off the street. 'Mini-cabs' would only be allowed to compete in the phone order market.

The next best option is to introduce a competitor to the taxi system in the form of a 'mini-cab' system

The parallel system of 'black cabs' and a 'mini-cab' system has worked well in the United Kingdom. There are no licensing restrictions on London's black cabs. Drivers are required to pass rigorous knowledge tests which form substantial entry barriers. The 'mini-cab' system has played a significant role as a competitor despite the restriction that they cannot pick up fares off the street.

'Mini-cabs' could be added gradually to avoid substantial compensation costs, but an especially large allocation of licenses could be made to service upcoming demands of the Sydney Olympics. They could be required to have clearly distinguishable marks to delineate their status as certified 'mini-cabs'. The government's main role after certification of 'mini-cab' company operators and drivers would be to remind consumers of the distinctiveness of this service.

Pursuing such a strategy of deregulation would reduce the calls for compensation of current taxi licenseholders. Taxi operators would be likely to complain that the scarcity rents of their licenses would be diminished by increased competition, but the rent decline would be gradual.

Conclusion

Without drastic improvements, taxi services will not be able to service the Olympic Games. The best policy would be to allow the market to determine the number of taxis in operation, subject only to government certification of driving ability, knowledge of services required and character references for drivers and safety checks for cars. Registration and fare structure would have to be clearly displayed on the outside of a taxi. This would lead to an expansion of the types of taxis on offer.

The principal cost of complete deregulation would be loss of the value of existing license plates which would no doubt prompt calls for compensation by the taxi industry lobby.

Partial deregulation may be the most expedient option if improvements are to be made before the Olympics. This could be facilitated by a parallel system of 'mini-cabs' which compete alongside the taxi market. These 'mini cabs' would operate through phone bookings, as is done in the United Kingdom.

Policy

References

Australian Bureau of Statistics, *Consumer Price Index Australia*, 6401.0.
 Australian Bureau of Statistics 1996, *Detailed Expenditure Items, 1993-94 Household Expenditure Survey Australia*, 6535.0.

Australian Bureau of Statistics 1997, *Motor Vehicles in Australia*, 9311.0.

Australian Taxi Industry Association 1999, Fax Communication.
 Findlay, C.C. and D.K. Round 1995, 'Open Streets or Taken for a Ride? Reforming Australia's Taxi Markets', *Agenda* 2(1): 63-72.

Gaunt, C. 1996, 'Taxicab Deregulation in New Zealand', *Journal of Transport Economics and Policy*: 103-106.

Gaunt, C. and T. Black 1994, 'The Unanticipated Effects of the Industry Commission's Recommendations on the Regulation of the Taxi Industry', *Economic Analysis and Policy* 24(2): 151-170.

Gaunt, C. and T. Black 1996, 'The Economic Cost of Taxicab Regulation: The Case of Brisbane', *Economic Analysis and Policy* 26(1): 151-170.

Industry Commission 1994, *Urban Transport*, AGPS, Melbourne.

Morrison, P.S. 1997, 'Restructuring effects of deregulation: the case of the New Zealand taxi industry', *Environment and Planning* 29: 913-928.

NSW Department of Transport 1997, Taxi Operator Accreditation Interim Application Package, August 1997.

NSW Department of Transport 1998, Sydney Taxi Customer Survey, March 1998.

NSW Department of Transport 1999, Communication.

New Zealand Ministry of Transport 1999, various papers on taxi industry issues, email communication.

Schreiber, C. 1975, 'The Economic Reasons for Price and Entry Regulations of Taxicabs', *Journal of Transport Economics and Policy* 9(3): 268-279.

Swan, P.L. 1979, 'On Buying a Job: The Regulation of Taxi Cabs in Canberra,' Policy Monographs 1, Centre for Independent Studies, Sydney.

Teal, R. and M. Berglund 1987, 'Impacts of Taxi Cab Deregulation in the USA', *Journal of Transport Economics and Policy* 21: 37-56.

Victorian Taxi Directorate 1999, Communication.

Williams, D.J. 1980a, 'Information and Price Determination in Taxi Markets', *Quarterly Review of Economics and Business* 20(4): 36-43.

Williams D.J. 1980b, 'The Economic Reasons for Price and Entry Regulation of Taxicabs: A Comment', *Journal of Transport Economics and Policy* 14(1): 105-112.