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Ex-Post Assessment of Government Intervention in the Taxi Market in Ireland: 1978-2014

-- Paper by Paul K. Gorecki --

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EX-POST ASSESSMENT OF GOVERNMENT INTERVENTION IN THE TAXI MARKET IN IRELAND: 1978-2014

By Dr. Paul K Gorecki¹

Introduction

1. The purpose of this paper is to provide an ex post assessment of two major interventions by the State in the regulatory regime governing the taxi market in Ireland. These interventions liberalized and then, subsequently, restricted entry. Ex post assessment of such interventions is facilitated by sound ex ante assessment. Indeed, the two are inextricably linked. Sound ex ante analysis facilitates the collection of data on which to conduct an ex post assessment. The predicted outcome can then be compared to the actual outcome to gauge the effectiveness and impact of these policy interventions. Hence the ex post assessment presented in this paper takes into account State-commissioned and other ex ante analysis of the taxi market.

2. The taxi market is part, albeit the most important component, of the broader small public service vehicle sector (Section 2). The two major interventions in the taxi market are set out in Section 3. These interventions revolve around quantitative and, to a lesser extent, qualitative restrictions on the number of taxi licences. Five indicators are used to provide an ex post assessment of the impact of these restrictions:

- The number of taxi licences (Section 4);
- The degree of substitutability between taxis and other small public service vehicles such as hackneys (Section 5);
- The value of taxi licences (Section 6);
- Fare discounting by taxis and waiting times by passengers (Section 7); and,
- The ease with which different business models can survive and prosper (Section 8).
- Section 9 concludes.

3. The five indicators used for the purposes of ex post assessment are, of course, interrelated. Essentially they measure the implications of restricting the number of taxi licences compared to the counterfactual in which such controls are absent. The indicators are important from a public policy point

¹ The paper was prepared as background to the meeting of Working Party No. 2 on Competition and Regulation's meeting on 'Ex-post Evaluation of Government Interventions' to be held in Paris on 24 February 2014. It represents the author's own views and not necessarily those of the OECD or its Members. This paper is based on and extends Gorecki (2009, 2012, 2013). This paper has benefited from conversations and discussions with Sean Lyons and Declan Purcell. I should also like to thank the National Transport Authority for promptly answering my queries and furnishing information and data. The usual disclaimer applies.

of view, measuring: the degree to which the restrictions are binding (e.g. the number of taxi licences); the economic efficiency of supplying small public service vehicle passenger transport services (e.g. the degree of substitution of hackneys and other small public service vehicles for taxis); the cost to consumers (e.g. waiting times); and, the transfer of income from consumers to producers (e.g. value of taxi licences).

1. Small public service vehicles: some definitions

4. Taxis are part of the broader small public service vehicle (SPSV) sector which refers to vehicles for public hire carrying eight or less passengers. In 2013 there were 21,959 SPSVs in Ireland, divided into five vehicle licence categories:² taxi; wheelchair accessible taxi (WAT); hackney; wheelchair accessible hackney (WAH); and limousine. Definitions as well as the number of licences in each category as of November 2013 are presented in Table 1.

Table 1. The Small Public Service Vehicle Sector, Ireland, 2013.

SPSV Category	Definition	Licence Number (%)
Taxi	"... an SPSV licensed to carry up to eight passengers which can ply for hire on the street or stand for hire at taxi ranks or to be called out or pre-booked by a passenger." Taxis are subject to maximum regulated fares and can use bus lanes.	17,153 (78.1)
Wheelchair accessible taxi (WAT)	A taxi "which meets a number of additional vehicle specifications to allow use by persons using their wheelchairs"	913 (4.2)
Hackney	"... an SPSV licensed to carry up to eight passengers which must be pre-booked privately and cannot ply for hire on the street or stand at taxi ranks. The fare must be agreed in advance with the customer. Hackneys may not use the bus lanes."	2,560 (11.6)
Wheelchair accessible hackney (WAH)	A hackney that satisfies certain conditions in order to allow its use by persons using their wheelchairs.	17 (0.1)
Limousine	"... an SPSV licensed to carry up to eight passengers which must be pre-booked privately and cannot ply for hire on the street or stand at taxi ranks. The fare must be agreed in advance with the customer. A limousine must be suited by its style and condition to be used for ceremonial, corporate or other prestige purposes."	1,316 (6.0)

Notes: The category WAH was introduced in 2010; number of vehicle licences refer to the situation as of November 2013.

Source: Goodbody (2009, pp. 4-5); CTR (2010a); and NTA (2014).

5. Taxis are the most important component of the SPSV sector, accounting in 2013 for 78% of all SPSV licences. The next most important category is hackneys, accounting for 12% of SPSV licences. Taxis are subject to maximum fare regulation, but have greater flexibility than hackneys in where they can pick up passengers (e.g. on the street, at taxi stands, and pre-booked) and in their ability to use bus lanes. It is probably for these reasons that taxis are much more important than hackneys.

² Unless otherwise specified the term licences refers to vehicle licences.

6. A separate category of licences exists for WAT and WAH. However, there are relatively few such licences (913 or 4% of all SPSV licences), particularly for the latter category which was only created in 2010 (17 or 0.1%). WATs and WAH have much higher fixed and running costs, compared to taxis and hackneys.³ However, the maximum fare that a WAT can charge is the same as a taxi, thus reducing the incentive to provide such vehicles. It is partly for this reason that the State intervened to offset some of these costs through small, time limited subsidies.⁴

7. The final category is limousine which account for 6% of all SPSV licences. Limousines only became a separate SPSV category in 2000.⁵ Limousines appear to be a specialist niche in the SPSV sector that does not compete with the other SPSV categories, since they are “generally used for corporate and ceremonial purposes.”⁶

2. Liberalisation and Restriction of Taxi Licence Numbers

2.1 *Quantitative Easing of Taxi Licences: 2000*

8. The first major intervention in the taxi market to be considered is the abolition in 2000 of the cap or limit on the number of taxi licences.⁷ Quantitative limits on the number of taxi licences were introduced in 1978. Such limits were administered by local authorities that were also responsible for setting local maximum fares. In some cases, such as Dublin, local authorities combined to form a single taximeter area.⁸

9. The abolition of limits on taxi licences was due to a judicial decision that removed the legislative basis for such limits. The cap had been subject to increasing criticism for damaging consumer welfare (e.g. increased waiting times). The High Court judgment was accepted by the relevant Minister,⁹ who introduced regulations in late 2000 under which all suitably qualified persons could obtain a taxi licence. The High Court case arose out of unsuccessful attempts by the State to issue a number of additional (but not unlimited) taxi licences to various incumbent participants in the taxi market.¹⁰

2.2 *Indefinite Prohibition on Issuing New Taxi Licences: 2010*

10. The second major intervention was the reintroduction of quantitative limits on taxi licences in 2010 by the Commission for Taxi Regulation (CTR) through an indefinite prohibition on the issuing of

³ Fixed costs are 65-91% higher for a WAT compared to a standard saloon taxi, while the running costs in terms of fuel is 27% higher for a WAT compared to a standard saloon taxi. For details see Gorecki (2013, p. 256). The higher licence fee for taxi compared to a WAT is insufficient to offset these cost differences. The cost of a licence for a limousine, a WAT and a WAH is, currently, €1,000, €125 and €125, respectively. The corresponding licence fees for a taxi and a hackney were €6,300 and €1,000, respectively.

⁴ See Gorecki (2013, p. 256) for details.

⁵ Goodbody (2005, p. 6).

⁶ Goodbody (2009, p. 16, fn 10).

⁷ This and the next paragraph is based on Barrett (2007), Faber (1998), Fingleton, Evans and Hogan (1998), Goodbody (2009) and Kenny and McNutt (1998).

⁸ In the case of Dublin four local authorities were combined to form one taximeter area for regulatory purposes.

⁹ In other words, the Minister did not appeal the case to the Supreme Court.

¹⁰ Barrett (2007, p. 142) and Goodbody (2009, p. 13).].

new taxi licences.¹¹ These quantitative restrictions were enhanced through a series of largely qualitative restrictions on the taxi market contained in the Taxi Regulation Act 2013 (e.g. a prohibition on trading taxi licences). In some important ways, discussed below, the 2010-2013 set of restrictions are likely to be more effective in limiting supply than the 1978-2000 restrictions.

11. The CTR, an independent regulator, was created in 2004.¹² It assumed the functions of the local authorities in terms of licencing and of setting maximum taxi fares. Maximum taxi fares were set biannually after careful analysis of taxi costs and other factors (e.g. NTA, 2012). However, it was not until 2006 that the CTR created a single national taximeter area to replace the 34 separate taximeter areas. Maximum fares were set for Ireland as a whole. Although a taxi licence means that the taxi can supply transportation services anywhere in Ireland, in practice the supply of services is limited to the county in which the taxi driver has been licenced and thus will likely have the local knowledge necessary to supply taxi services in an efficient manner.

12. The new quantitative and qualitative restrictions were introduced, inter alia, as a result of producer concerns in the face of declining demand occasioned by the Great Recession.¹³

3. How Binding Was The Cap?

3.1 Introduction

13. Quantitative restrictions place an upper limit or cap on the number of taxi licences. If the cap is to have an impact on the supply of taxi licences it must be binding – that is, absent the restrictions the supply of taxi licences would be larger. The tighter or more binding the restriction, the greater is the likely difference between cap and the number of licences that would be issued absent the cap. Hence the abolition of the cap in 2000 should lead to an increase in the supply of taxis, while the imposition of a prohibition on issuing new taxi licences in 2010 will gradually become binding as demand increases, but supply remains constant. However, as we shall see, the actual situation is a little more nuanced than this somewhat stylized account.

3.2 Letting Market Forces Operate: Removing the Cap on Numbers

14. As noted above the administration of the cap on the number of taxi licences was the responsibility of local authorities. In our exposition we concentrate on Dublin, the most important taximeter area in the country. In 2000 Dublin accounted for 70% of all taxi licences in Ireland. While the initial number of taxi licences in Dublin was set at the 1978 level, there was some, albeit limited, increase in the maximum number of licences in the subsequent 22 years (Table 2). The evidence suggests that this increase did not match the increase in demand for taxi services. Fingleton, Evans and Hogan (1998, p. 9), using changes in GDP as a proxy for demand, conclude that in 1998 approximately 4,500 taxis would be

¹¹ For details see Gorecki (2009, 2012, 2013) and references cited therein. It is proposed to reaffirm the prohibition in new regulations to be made in 2014 under the Taxi Regulation Act 2013. For a discussion see Competition Authority (2014).

¹² The Commission for Taxi Regulation subsequently became subsumed into the National Transport Authority on 1 January 2011.

¹³ These concerns were often expressed rather forcefully e.g. occupation by taxi representatives of the offices of the CTR, blocking access to Dublin Airport and slowing traffic in Dublin city centre on late shopping days. Based in media reports and personal observation. The demands of the taxi drivers for a moratorium on issuing new taxi licences also received considerable support from elected representatives across the political spectrum (Gorecki, 2009, pp. 29-31).

required to satisfy demand in Dublin. However, for a variety of reasons they considered this to be an underestimate of demand for taxis in 1998 (ibid, pp. 9-10).

Table 2. Maximum Number of Taxi Licences, Dublin, 1978-2000

Period	Maximum Number	Comment
1978-1992	1,824	The number of licences extant in 1978
1992-1997	1,974	Increase in licence numbers of 150 in 1992
1998-2000	2,374	Increase in licence numbers of 400 in late 1997

Notes: Dublin refers to four local authorities: Dublin City County Council; Fingal County Council; Dun Laoghaire/Rathdown County Council; and, South Dublin County Council.

Source: Fingleton, Evans & Hogan (1998, p.4, p. 6).

15. In view of this analysis, the removal of controls limiting the number of taxi licences should lead in Dublin, other things equal, to at least a doubling in the number of licences. The evidence is consistent with this prediction. In the two years following liberalization in late 2000 there was more than a three-fold increase in the number of taxi licences in Dublin (Table 3). Other major urban taximeter areas in Ireland also experienced increases in taxi numbers following liberalization, albeit of a somewhat lesser magnitude than Dublin, suggesting that the cap on the number of licences had been much tighter in Dublin. As always there is a need to consider whether other explanations may have accounted for the increase in taxi numbers. However, factors such as increases in demand are unlikely to be anything but a minor cause.^{14,15}

Table 3. Number of Taxi Licences, Pre- and Post-Liberalisation, Major Urban Taximeter Areas & Ireland, 2000-2002.

Taximeter Area	Licence Number: 2000	Licence Number: 2002	Index (2000=100)
Dublin	2,722	8,609	316
Cork	216	590	173
Galway	148	410	179
Limerick	207	434	110
Waterford	41	147	258
Ireland	3,913	11,630	297

Notes: For definition of Dublin see notes to Table 2. Taxi licences appear to include WAT. The number of licences refer to November in 2000 and November 2002

Source: Department of Transport (2002).

3.3 *Imposing a New Cap on Taxi Numbers: Is it Binding?*

16. The prohibition on issuing taxi licences in 2010 was indefinite. No end date or mechanism was specified in the legislation or the accompanying Explanatory Note for a relaxation of the suspension on

¹⁴ If increases in demand are proxied by changes in GDP, then demand for taxi services rose by around 5% in 2001 and 2002. For details of real growth in GDP see: http://www.esri.ie/irish_economy/. Accessed 10 January 2014.

¹⁵ It should also be noted that subsequent to 2002 there was a considerable slowing down in the growth rate of taxis licences in Dublin, consistent with the view that the 2000-2002 expansion of taxi licences was the result of pent-up demand created by the 1978-2000 quantitative restrictions on taxi licences. (Goodbody, 2009, Table 4.3, p.32).

issuing new licences.¹⁶ The prohibition was introduced after taxi licence growth in Ireland had expanded almost continually since liberalization in 2000 to reach a maximum in 2008.¹⁷ Since then there has been a small decline in the number of taxi licences. There are a number of reasons to suppose that the 2010 prohibition on issuing new licences is unlikely, as yet, to be binding. First, economic growth – a proxy for demand – since 2010 has been sluggish, even negative.¹⁸ Second, taxi drivers in deciding whether or not to remain in the taxi business consider alternative employment opportunities. Sluggish growth rates and continued high unemployment – around 12% – suggest few attractive alternative opportunities are currently available.

17. Third, to the extent that the prohibition was anticipated then additional licences may have been applied for in expectation of future rents as the licences gained value.¹⁹ This creates a margin of spare or excess capacity.²⁰ Fourth, other indicators such as continued fare discounting suggest that the prohibition is not, as yet, binding. Fifth, the number of taxi licences is only an imperfect measure or proxy for the supply of taxi services. As demand for taxi services increases, but the supply of taxi licences remains constant, the utilization of taxis will likely increase. In other words, although the number of licences is unchanged, the supply of taxi services increases. The evidence is consistent with this view.²¹

4. Efficient Provision of Taxi Services

4.1 Introduction

18. Binding quantitative restrictions on the number of taxi licences can result in the excess demand for taxi services being met by less efficient alternative SPSV categories. Hackneys are likely to be substitutes for taxis for customers that pre-book.²² There is also evidence of hackneys competing for customers at taxi ranks by setting up their offices close to taxi ranks.²³ However, due to the restrictions on

¹⁶ CTR (2010a).

¹⁷ The number of taxi licences was 19,577 in 2008, the number of WAT 1,600 (CTR, 2009a, p. 11). The definition of taxis in Table 3 appears to include WAT. The change in taxi plus WAT licences between 2000 and 2008 was from 3,913 to 21,177 or 541%.

¹⁸ Real GDP growth rates were: -1.1%, 2010; 2.2%, 2011; 0.2%, 2012; 0.3%, 2013; and, a forecast of 2.7% for 2014. For details see Duffy et al (2013, Executive Summary).

¹⁹ There are some important caveats concerning this possibility which are discussed in Section 6.

²⁰ The TRRG (2011), based on Indecon (2011), argue that there is 13-22 per cent excess capacity in the supply of taxi services meriting government intervention. However, this needs to be qualified in a number of important ways: Gorecki (2012, 2013) has previously argued that (i) the Indecon estimates of excess capacity were systematically biased upwards; (ii) it is not clear that the taxi market has any more or less excess capacity than other sectors of the economy; (iii) the taxi market showed signs of adjusting to the decline in demand occasioned by the Great Recession through fare discounting and market exit; and, (iv) the taxi market does not share the characteristics of sectors that the European Commission has permitted to form crisis cartels to reduce capacity.

²¹ Faber (1998, p. 49) observes, “Because entry to the taxi market has been restricted for a considerable period, the practice of cosyng [i.e. the taxi owner renting its use to another taxi driver] has become prevalent. This ensures that taxis have high utilization rates and are often used virtually on a round the clock basis.” Average utilisation rates for taxis were reported by taxi dispatch operators for 2009, 2010 and 2011 as 56%, 46%, and 40%, respectively. If the median is used instead of the mean the results did not change materially. For details see Indecon (2011, Table 5.4, p. 83).

²² In terms of method of hire, pre-booked accounted for 48% of taxi hires in 1997 in Dublin; 38% in 2001. Goodbody (2009, Table 3.3, p. 19).

²³ Fingleton, Evans & Hogan (1998, p. 8).

the method of hiring a hackney, these vehicles are more likely to have empty return journeys than a taxi. Vehicles are thus used less efficiently.

19. WAT are, of course, very close substitutes for a taxi, but have much higher fixed and running costs. Hence WAT are only likely to provide taxi services when quantitative controls on taxis have created sufficient rents to offset the higher costs of WAT. Limousines appear to be a poor substitute for taxis.

20. Hence we would expect binding quantitative restrictions on taxi licences to lead to an increase in hackneys and WAT, compared with the absence of such restrictions. This, in turn, is likely to lead to demands from taxi owners for quantitative restrictions to be extended to these other SPSV categories. In short, there is regulatory creep.

21. It could, of course, be argued that the characterization of the increase in the number of WATs occasioned by limitations on the number of taxis as an inefficient use of resources is partial at best. WATs yield positive social benefits that need to be weighed against the increase in costs of service provision. However, this argument, while superficially appealing, should be treated with a considerable degree of scepticism. An increase in the number of WATs does not necessarily translate into a corresponding increase in the number of disabled persons using a WAT. Indeed, the rise in WATs may be of little assistance to disabled persons requiring wheelchair accessible services; instead resulting in all users of taxis and WATs experiencing a decline in service quality.

22. In order for a WAT to enter the SPSV sector it needs to cover its additional costs. If entry controls on taxi licences are binding, there will be considerable excess demand for taxis. Fare discounting will not be observed. Unmet consumer demand will result in lengthy queues. Under these conditions the owner of the WAT has a much greater financial incentive to serve persons without wheelchairs, since the costs of servicing such passengers are much *lower* as compared to a person requiring a wheelchair accessible vehicle, while the revenue, for a given journey, is the *same*.²⁴ The binding constraints on taxi licence numbers that led to increased WAT also provides the explanation as to why WAT will favour servicing passengers not requiring wheelchair accessible services. The solution to the problem of insufficient wheelchair accessible SPSV services needs to be found elsewhere than a ban on new taxi licences.

4.2 Moving Towards a More Cost Effective Provision of SPSV Services

23. The binding nature of the 1978-2000 quantitative limits on taxi numbers in Dublin and in other urban taximeter areas created an incentive for hackneys and WAT to meet the unmet demand for SPSV services. In Dublin the evidence suggests that hackneys were substitutes for taxis.²⁵ The fact that there was a moratorium on issuing hackney licences between August 1997 and September 1998 is also consistent with the view that hackneys were substitutes for taxis.²⁶ WAT licence numbers in Dublin increased substantially, as expected, in both absolute terms and relative to the number of taxis; from 150 or 8% of all

²⁴ Indeed, if the choice for WAT is between a wheelchair user and accepting more than one passenger none of which require wheelchair accessible services, the revenue will be higher for the WAT in the latter instance, since there is a flat per passenger charge over and above the first passenger.

²⁵ Faber (1998, p. 48); Kenny and McNutt (1998, p. 3).

²⁶ Fingleton, Evans & Hogan (1998, p.7). Between 1978 and 1995 hackneys were regulated by the Carriage Office which imposed no restrictions on entry. In 1995 regulatory responsibility was transferred to Dublin Corporation which not only regulated taxis and WATs, but was given the power to place a moratorium on hackney numbers (ibid, p.5, p.7). Faber (1998) recommended ending the moratorium.

taxi licences in 1997 to 450 or 19% in 1998.²⁷ All new taxi licences over and above the limits set for taxis were for WAT.

24. In view of the above analysis we would expect the abolition of quantitative restrictions in 2000 to result in the following changes in the composition of the SPSV licence categories:

- i. a decrease in the absolute and relative importance of hackneys, not only due to the increase in taxi licences from entrants from outside the SPSV sector, but also a switch by owners of vehicles licenced as hackneys to taxi licences; and,
- ii. a decrease in the relative and perhaps absolute importance of WAT licences, in part because some WAT licences would switch to taxi licences and, in part, because the extra costs of a wheelchair accessible vehicle provide a disincentive to apply for new licences for such vehicles.

25. The absolute and relative importance of hackneys in Dublin is presented in Table 4 for 1994 to 2008. Notwithstanding some caveats concerning these data,²⁸ Table 4 is clearly consistent with the predictions: in the period when quantitative restrictions were in place, hackneys increased substantially in importance both in absolute terms and relative to the number of taxis. For example, in 1994 there were 4 hackneys for every 10 taxis in Dublin; by 2000, 13 for every 10, respectively.

26. Once the quantitative restrictions were removed in 2000, however, then, as predicted, the number of hackney licences declined, both in absolute and relative terms. For example, while in 2000 there were 13 hackneys for every 10 taxis, by 2002 there were only 3 hackneys for every 10 taxis. In part this was due to a switch from hackney to taxi licences for existing vehicles.²⁹ This switch reflected the advantages of a taxi as compared with a hackney in providing SPSV services, rather than a decline in pre-booked hiring, the market niche of hackneys. In Dublin, for example, the share of pre-booked hires for taxis (including WATs) and hackneys was 47.9% in 1997, declining to 37.7% in 2000, before increasing to 52.6% in 2005 and 58.1% in 2008.³⁰

²⁷ Fingleton, Evans & Hogan (1998, p. 41).

²⁸ Both taxi and WAT numbers in the table are biased upwards since taxis includes WAT while hackneys include limousines. It is only for the 2000s that these four categories are reported separately. These data show that the ratio of hackneys to taxis reported in Table 4 is biased upward. The actual data is available for 2008 and shows that instead of the 5.4% reported in Table 4, the actual result is 2.1% (Goodbody, 2009, Table 4.4, p. 34), while for 2004 the corresponding percentages are 14.8% and 6.7% (Goodbody, 2005, Table 4.2, p. 15). For the 1990s the ratio of hackneys to taxis in Table 4 may be biased slightly downwards. If the number of taxis is taken from Table 2, then for 1994, 1996, 1998 and 2000 the ratio of the number of hackneys (as set out in Table 4) to the number of taxis is 43.7%, 98.7%, 107.2% and 148.2%, respectively.

²⁹ Goodbody (2009, p. 13) for Dublin. A case study for Sligo showed that the increase in taxi licences was also accounted for by taxi drivers who had formerly driven other people's taxis (Goodbody, 2005, p.13).

³⁰ Goodbody (2009, Table 3.3, p. 19).

Table 4. The Importance of Hackney Licences, Pre- and Post-Liberalisation, Dublin, 1994-2008.

Year	Number of Hackney Licences	Hackney Licences as % of Taxi Licences
1994	863	44.1
1996	1,949	96.7
1998	2,546	111.9
2000	3,518	127.6
2002	2,096	28.8
2004	1,348	14.8
2006	792	7.4
2008	676	5.4

Notes: For definition of Dublin see notes to Table 2. Taxi licences appear to include WAT, while hackney licences include limousine licences.

Source: Goodbody (2009, Table 4.3, p. 32).

27. We do not have data on a consistent basis for WAT pre- and post-liberalization, either for Dublin or nationally. However, national data are available for the year of first registration for WAT extant in 2008. These data, which are set out in Table 5, are consistent with the view that the quantitative limits on taxis were becoming ever more binding prior to 2000, and that subsequently, also consistent with predictions, the number of new WAT licences declined after quantitative limits on taxis were abolished in 2000. However, it appears that, despite the much higher cost of WAT, there is a niche market sufficient to attract ongoing entry, albeit at about half the level when entry controls were in place.

Table 5. Distribution of WAT, First Year of Registration, Ireland, 2008.

Year First Registration	Number	Year of First Registration	Number
1994	5	2002	110
1996	4	2004	121
1998	176	2006	128
2000	181	2008	85

Source: Goodbody (2009, Table 4.5, p. 37).

28. One of the predictions concerning the abolition of entry controls in 2000 was that WAT would experience difficulty competing with taxis due to higher fixed and running costs, which are not offset against higher charges. The evidence is consistent with this view. After liberalization in 2000, the State created a Taxi Hardship Panel (2002). One of the hardship categories, accounting for 16% of all claims, was ‘WAT Operators Claiming Higher Operating Costs.’ The Taxi Hardship Panel accepted the claims but noted that the increased WAT costs were offset to some extent against higher occupancy.³¹

4.3 A Phony War? Prohibiting New Taxi Licences

29. The indefinite prohibition on issuing new taxi licences in 2010 also covered hackneys. In that sense the 2010 restrictions are more comprehensive than the 1978-2000 restrictions that largely omitted

³¹ For details see footnote 24 above.

hackneys from caps on licence numbers. However, the 2010 prohibition does not apply to WAT, WAH and limousine licences. As the prohibition becomes binding, there is likely to be an increase in the number of WAT, WAH and, to a lesser extent if at all, of limousines, compared with the situation absent the prohibition. However, there are several reasons for suggesting that there is unlikely to be any substantial regulatory-induced increase in WAT, WAH and limousines in the years immediately following the prohibition on new taxi and hackney licences in 2010. First, for reasons set out in Section 4.3, the prohibition on new taxis and hackneys is unlikely, as yet, to be binding. Hence at this time there is unlikely to be large scale entry of WATs (and WAHs) as occurred in Dublin in the late 1990s when the restrictions on entry were binding and had been in place some time.

30. Second, there is some uncertainty as to the duration of the 2010 prohibition, which may deter entry of WAT and WAH. The legal instrument imposing the ban does not specify a time limit or what ban is supposed to achieve.³² Nevertheless, the prohibition can be seen as satisfying the demand of the incumbent taxi licence owners for a moratorium on new licences due to the decline in demand occasioned by the Great Recession.³³ At the same time the prohibition was also considered by the CTR as a mechanism to increase the number of wheelchair accessible vehicles. However, there are no WAT/WAH targets or timetables, nor a clearly defined exit strategy from the prohibition.³⁴ Instead, the CTR stated that it would monitor the situation and if service levels to consumers were impacted it “will reconsider issuing standard taxi licences to ensure effective competition and supply.”³⁵ This implies that as soon as the prohibition became binding the CTR would relax the prohibition. However, that seems unlikely to occur given that the aim of increasing the number of wheelchair accessible vehicles would be unlikely to have been achieved,³⁶ together with the ongoing demands by incumbent taxi drivers for no new entry. Hence the prohibition is likely to last for some time.

31. The evidence on the growth of new SPSV vehicles, by category, expressed as a percentage of the number of licences in that category is set out in Table 6 for Ireland for selected dates. It shows, for example, that new limousine licences in 2008 accounted for 15.9% of licenced limousines in 2008. There is no evidence of an upsurge in new WAT, while the percentage increase in WAH is misleading since only 17 new licences were issued by 2013. This pattern is not surprising for the reasons set out above. Furthermore, the number of new wheelchair accessible licences is higher than it would otherwise be due to a small time limited subsidy for wheelchair accessible vehicles that operated in 2011 and 2012.³⁷ Limousine services seem to be in a separate category, with a pretty steady increase in numbers throughout the period.

³² CTR (2010a).

³³ This is discussed in Gorecki (2009, 2013) and in footnote 13 above.

³⁴ The Regulatory Impact Statement (RIA) argued in favour of such timetables and targets. The RIA may be found in CTR (2009b)

³⁵ CTR (2009c, p. 1).

³⁶ In a 2011 Ministerial Brief to the Minister of Transport reference is made that the CTR proposed that WAT should constitute 10% of all taxis (i.e. WAT plus taxis) (DoT, 2011). The share of WAT of taxis plus WAT was 5.0% in 2013 (Table 1),

³⁷ The scheme assisted 21 WAT and WAH in its initial phase from September to December 2011. The scheme was subsequently reopened between February and May 2012 to support the upgrade of existing wheelchair accessible vehicles and assistance to new vehicle licence applicants for the provision of accessible services. No further assistance has been announced. The number of new of WAT (and WAH) licences issued were as follows: 28 (4), 2011; 28(11), 2012; and 16(6), 2013. (Based on information supplied by NTA.)

Table 6. Increase in SPSV Licences (%), by Category, Pre and Post Prohibition, Ireland, 2008-2013.

Period/Year	Taxi	Hackney	WAT	WAH	Limousine
2008	8.7%	17.1%	17.6%	-	15.9%
Jan-June 2010	0.1%	2.2%	4.8%	-	3.4%
July-Dec. 2010	-	-	0.4%	0%	4.6%
2012	-	-	2.6%	78.6%	13.0%
2013	-	-	1.7%	35.3%	13.4%

Notes: Each percentage is calculated as the ratio of the number of new licences for the i^{th} SPSV category in period j to the number of licences extant for the i^{th} SPSV category in period j . For 2008 and 2012 for the denominator refers to December, for 2010, October, for 2013 November.

Source: Based on data supplied by the National Transport Authority, Goodbody (2009, Table 4.4, p. 34), CTR (2010b, p. 4) and NTA (2014).

5. Taxi Licence Values: Up, Up, and Away

5.1 Introduction

32. If the cap on the number of taxis is binding then taxi licences are likely to acquire a value reflecting the discounted value of future profits above and beyond a normal rate of return. As demand for taxi services increases and the cap remains in place or expands slowly in relation to demand, then, other things being equal, the value of the taxi licence will increase. However, once the cap on the number of taxi licences is removed then licence values are likely to collapse.

5.2 Taxi Licences: A Valuable Commodity

33. The evidence on the value of taxi licences in Dublin in the period 1978 to 2000 is consistent with a priori predictions. As the period progressed and the cap become more stringent, for reasons set out above, the value of a taxi licence rose steadily (Table 7); in fact, taxi licence values in Dublin increased in real terms tenfold over this twenty year period. Dublin taxi licence values were high compared with Cork and Galway, which is consistent with Table 2.³⁸ Furthermore Dublin prices were high in comparison with selected cities in the US, Canada, New Zealand, the UK, France and Germany.³⁹ After the liberalization of entry into the taxi market in 2000 the value of taxi licences collapsed. The Taxi Hardship Panel (2012) was unable to compensate taxi licence holders for the loss in the capital value of their licence.⁴⁰ However, taxi licence holders have recently taken the regulatory authorities to the High Court arguing that their property rights were breached when deregulation occurred in 2000. The case concluded in late 2013, with judgment expected in 2014.

³⁸ The value of a taxi licence in Cork was, €88,900, in Galway €101,600. Data for the other taximeter areas in Table 2 are not available. These data are taken from Barrett (2007, Table 2, p. 137). This source also presents values for Killarney (€88,900) and Ennis (€135,890).

³⁹ Barrett (2007, Table 2, p. 137).

⁴⁰ For details see Barrett (2007, pp. 145-146).

Table 7. Value of a Taxi Licence, Nominal & Real, Dublin, Selected Years, 1980-2000

Year	Value € Nominal	Value € Real
1980	4,400	4,400
1985	9,100	5,100
1990	54,600	26,000
1995	89,000	37,400
2000	114,000	42,300

Note: Nominal € values deflated by the CPI to obtain real € values.

Source: Barrett (2007, Table 3, p. 137).

6.3 *Banning the Trading in Taxi Licences*

34. The prohibition on the issuing of new taxi (and hackney) licences in 2010 should as the restriction becomes binding lead to taxi licences gaining value. However, for reasons set out above, it is unlikely that the prohibition is binding and hence a taxi licence is likely to be of minimal value. In contrast to the situation in 1978-2000 where taxi licences were tradable and indeed advertised in newspapers, this is no longer the situation. The ability to trade taxi licences has been progressively restricted in recent years. In 2010, taxi licences could only be transferred one more time and then only if the vehicle was less than three years old.⁴¹ The Taxi Regulation Act 2013 went one step further and prohibited all taxi (and other SPSV category) licence transfers.⁴²

35. The rationale for this policy, according to the advisory Taxi Regulation Review Group (TRRG), was that it “... considered ... [it] necessary to move away from a system whereby a licence will have value in itself. A licence should determine- a person’s suitability to carry out a function and it should not have a monetary value or be traded on the open market.”⁴³ Arguably a driving licence, and not a vehicle licence, determines a person’s suitability to be a taxi driver.

36. In any event, the banning of the transfer of licences has an important consequence for ex post assessment. Taxi licence values will no longer be available to measure the impact of restricting entry, nor will they be constantly reported in the press as they were in the late 1990s as evidence of supply restrictions. There are also important implications from a resource allocation point of view. A taxi licence will eventually gain value – no matter what the TRRG argues – and the owner will want to realise that value. Hence much legal expense will undoubtedly be involved in finding a loophole in the legislation so that the value can be realized or alternatively resort will be made to lobbying for a change in the legislation.

⁴¹ CTR (2010).

⁴² Section 14 of the Act.

⁴³ TRRG (2011, p. 16).

6. Consumer Welfare: Fare Discounting and Waiting Times

6.1 Introduction

37. The price or cost of taxi services to the consumer can be decomposed into two parts:

$$P_{\text{TAXI}} = \text{Fare}_{\text{TAXI}} + W_{\text{TAXI}(t)} \quad (1)$$

- where $\text{Fare}_{\text{TAXI}}$ is the fare that the consumer pays the taxi operator, which is at or below the metered regulated maximum fare, while $W_{\text{TAXI}(t)}$ is the value of the time spent waiting. This method of characterising the price of taxi services is common in both the theoretical (e.g., De Vany, 1975) and empirical literature (e.g. Fingleton, Evans and Hogan, 1998, and Goodbody, 2009 for Ireland; and OFT, 2003 for the UK). In a world of binding quantitative constraints on the number of taxi licences, P_{TAXI} is likely to be higher absent these constraints. This reflects the fact that fares are less likely to be discounted and queues longer when there is shortage of taxis at current regulated maximum fares.

6.2 Improved Waiting Times

38. The liberalization of entry into the taxi market in 2000 led to a substantial decrease in waiting times for passengers. In Dublin on average waiting time for a taxi declined from 11.5 minutes in 1997 to 9.2 minutes in 2001, to 8.3 minutes in 2005 and 6.2 minutes in 2008. By another metric - the proportion of taxi journeys with waiting times of less than 10 minutes – there was an increase from 58% in 1997 to 86% in 2008. More details are provided in Table 8. Goodbody (2009, pp. 93-94) estimates consumer benefits of between €284 million and €313 million due to shorter waiting times in Dublin over the period 2000-2008. No information is available on the extent of fare discounting pre and post liberalization.

Table 8. Distribution of Waiting Times, Taxis, Pre and Post Liberalisation, Dublin, 1997-2008

Waiting Times	1997 (%)	2001 (%)	2005 (%)	2008 (%)
< 5 minutes	23.0	47.5	40.2	50.3
5-10 minutes	35.3	22.7	33.9	35.4
11-20 minutes	29.4	17.4	18.0	11.2
21-30 minutes	5.9	6.4	5.8	1.9
31-60 minutes	5.9	4.6	1.1	1.2
>60 minutes	0.0	1.4	1.1	0.0
Total	100	100	100	100
Average	11.5	9.2	8.3	6.2

Note: Waiting times refer to taxis and hackneys.

Source: Goodbody (2009, Table 6.3, p. 49; Table A2.1, p. 93).

6.3 A Veil of Ignorance

39. There is little evidence on either the extent of discounting and or on waiting times since the prohibition on issuing new taxi licences was introduced in 2010. On fare discounting, survey and anecdotal evidence suggests that there was discounting off the maximum fare in 2010, no doubt reflecting the decline in demand occasioned by the Great Recession.⁴⁴ For example, one survey reported that 23% of

⁴⁴ For details see Gorecki (2013, pp.253-255).

respondents had secured discounts.⁴⁵ Subsequently the evidence suggests, albeit anecdotal, that some fare discounting continues, consistent with the view set out above that the prohibition has as yet to be binding.⁴⁶ However, whether the trend is for less discounting, which would be consistent with the prohibition gradually having an impact, is not known.

40. An opportunity arose in 2010/11, during the research conducted for the TRRG referred to above, to update the work contained in Table 8 on waiting times. The opportunity was not, however, taken, despite the fact that the TRRG research was concerned with service quality. The research did mention waiting times in the context of measuring over or undersupply of taxi services but rejected its use, despite waiting times being employed by the CTR, the OFT and UK policy makers.⁴⁷ Nevertheless, research undertaken for Hailo – discussed in Section 8 - indicates waiting times in Ireland in 2012⁴⁸ can still be, on occasion, be lengthy.⁴⁹

7. Innovation, Flexibility and Competition

7.1 Introduction

41. Productivity, growth and service improvements are driven by competitive markets. Different business models sometimes compete with each other, while in other instances they might be complements. Market players may specialize in meeting separate market niches. Easy entry and exit allows resources to flow into a market to meet peaks in demand and leave when better opportunities exist elsewhere. Hence it is important that government intervention in markets, should as far as possible, retain - indeed promote - competitive markets.

42. The taxi market can be characterized as inherently structurally competitive with easy entry and exit, few sunk costs and a large number of small operators.⁵⁰ Flexibility is important in view of the pronounced peaks in demand in the evening/early hours and at weekends.⁵¹ Hence some taxi operators may see operating a taxi as a full-time occupation, others participate on a part-time basis to meet the peak demand.⁵² Innovation can improve the match between taxi driver and passenger, such as the Hailo

⁴⁵ Indecon (2011, Figure 5.7, p. 84).

⁴⁶ Based on mail shots at the author's south Dublin home. CAB2000 offered eight discount coupons (e.g. €5 off any pre-booked fare over €25) twice in 2013, while another firm offered a 20% discount. In January 2014 another firm offered to waive the call-out charge. All these discounts apply to the pre-booked market where the consumer can phone around for the best price.

⁴⁷ The grounds for rejection are not compelling: "They [i.e. the OFT] measure consumer waiting times for taxis, and if the waiting times are significant then an undersupply is assumed. This measure has a number of advantages and disadvantages, but merely observing a waiting time of X does not really tell us if there is an under or oversupply or the extent of oversupply. Further, these waiting times measures can be highly time-of-day/day-of-week/season-specific and can also be location-specific." (Indecon, 2011, p. 62).

⁴⁸ Goodbody (2009, Table 6.1, p. 48) provides data for Ireland for 2005 and 2008 comparable to that in Table 8 for Dublin.

⁴⁹ The Hailo survey results are not directly comparable to those in Table 8. The Hailo survey was conducted with respect to 500 respondents, who were asked a question concerning the longest (rather than the average) time that they had spent waiting for a taxi. 50% said that they waited for 30 minutes or more. For details see: <https://hailocab.com/dublin/press-releases/Irish-Consumers-Tired-Of-Waiting>. [Accessed 20 January 2014]. Additional details of the survey were provided to the author.

⁵⁰ For a discussion see Gorecki (2013, pp. 251-253).

⁵¹ The pattern of demand is set out in Goodbody (2009, pp.19-21)

⁵² Goodbody (2009, p.45) confirms this observation.

application founded by taxi drivers in London and currently operating in Dublin, Cork, Galway and Limerick.⁵³

43. We consider two aspects of regulation of the taxi market that are likely to influence innovation, flexibility and competition in the market: entry restrictions; and, a regulatory preference for the full time taxi operator model. It is, however, difficult to measure the impact of these restrictions.

7.2 Restrictions on Entry

44. Entrants often bring new ideas and organizational innovations, replacing less efficient incumbents.⁵⁴ Hence the restrictions on entry that occurred between 1978 -2000, and from 2010 onwards, are likely to lead to a less efficient and dynamic taxi market. This is especially the case for the latter period. During 1978-2000, entry was still possible by purchasing an existing licence, albeit for an escalating amount as the period progressed. However, for the period 2010 onwards, entry through purchasing an existing taxi licence was first limited and then prohibited in the Taxi Regulation Act 2013. As a result more efficient entrants cannot replace less efficient incumbents; more resources are used than is necessary. Hence the abolition of the restrictions on the number of taxi licences in 2000 should have led to a more efficient and dynamic taxi market, with the reverse occurring with the prohibition on new licences in 2010.

7.3 Restrictions on Part-Time Taxi Drivers

45. Regulation of the taxi market during 1978-2000, and from 2010 onwards, showed a marked preference for the full-time as opposed to the part-time taxi operator. In the former period Fingleton, Evans and Hogan (1998, p. 3) state, “.. they [taxi drivers] must be available for work for at least forty hours per week, not work more than eleven hours per day and not engage in another occupation which may impair their efficiency. In principle, this excludes part-time taxi drivers from the market.” While these restrictions were abolished before the removal of entry controls in 2000,⁵⁵ there are indications that regulatory policy is again favouring the full-time taxi driver.

46. The Minister responsible for the introduction and passage of the Taxi Regulation Act 2013 stated in 2012 “I am very much in favour of full-time taxi drivers. I think that they are the bones of the industry and they must be supported.”⁵⁶ The move in 2013 that all taxis should have semi-permanent markings is likely to disadvantage the part-time taxi driver, with no evidence provided that consumers had any difficulty identifying taxis with the normal roof signs, which could easily be detached when not in use.⁵⁷ Under the Taxi Regulation Act 2013 taxi drivers with other jobs – predominantly part-time taxi drivers – have certain additional reporting requirements, including notifying their employer that they perform taxi services.⁵⁸

⁵³ See <https://www.hailocab.com/ireland>, for details. Accessed 17 January 2014.

⁵⁴ See, for example, Baldwin and Gorecki (1991).

⁵⁵ The change took place under Statutory Instrument 295 of 1998, Road Traffic (Public Service Vehicles) (Amendment) (No 2) Regulations 1998. This stated that drivers of an SPSV “shall not drive [such a vehicle] ... for more than eleven hours in any one day in any period of three consecutive days ...”

⁵⁶ The comments were made in evidence before the Oireachtas (Parliament) Joint Committee on the Environment, Culture and the Gaeltacht on 29 February 2012.

⁵⁷ This is discussed in Gorecki (2013, p. 266-267).

⁵⁸ Section 11 of the Taxi Regulation Act 2013. The ostensible rationale for this notification is an understandable concern that drivers may work excessive hours, with the resulting increase in accidents. No

47. The evidence suggests that part-time taxi drivers primarily enter to serve demand during peak periods and that in the late 2000s they were becoming increasingly important.⁵⁹ Indeed the rise in the importance of part-time taxi drivers might explain in part the shorter waiting times recorded in Table 8. Hence we can conclude tentatively that the abolition of entry controls in 2000 combined with the removal of rules concerning working for 40 hours contributed towards a more flexible taxi market better able to address the pronounced peaks in demand, while the re-imposition of entry controls in 2010 combined with measures to discourage part-time taxi drivers is likely to result in a less flexible taxi market in terms of meeting customers demand with longer waiting times the result.

8. Conclusion: Regulatory Reprise

48. The ex post assessment of quantitative limits on the number of taxi licences in Ireland over the periods 1978-2000 and 2010 to the present is consistent with expectations. Consumers experience higher prices and longer waiting times. The importance of less efficient alternative SPSV vehicle licence categories increases. The incentives created by the quantitative limits mean that the passengers requiring wheelchair accessible services are unlikely to benefit to any significant degree from regulatory induced increases in WAT/WAH. Experimentation with different business models is limited. In short, service quality declines.

49. All these findings were well established based on the 1978-2000 experience. It is thus surprising that a prohibition on new taxi and hackney licences was introduced in 2010. It is almost as though collective amnesia descended on those responsible for making policy in this area. If urgent action is not taken soon then there is a real danger that the 1978-2000 record will be repeated. The National Transport Authority, which assumed responsibility for SPSV regulation on 1 January 2013, needs to specify precisely the purpose of the 2010 prohibition on new taxi and hackney licences, whether the purpose is likely to be met, the cost to consumers and when success has been achieved and the prohibition removed. The conclusion of this paper is that if the object of the prohibition is provide more wheelchair accessible services, it is likely to be a failure; if its objective is to relieve lobbying from taxi licence owners experiencing falling returns because of the Great Recession then the prohibition is likely to be more successful.

evidence was provided in developing this measure that full-time as compared to part-time taxi drivers were more likely to work excessive hours, that other measures could have been employed to address the issue of excessive hours across *all* taxi drivers or that insurance markets do not already provide a sufficient mechanism – higher rates for risky drivers – to deter excessive hours. See Gorecki (2013, pp. 265-66) for further discussion and references.

⁵⁹ Goodbody (2009, p. 45).

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