TAXICAB REGULATION AND URBAN RESIDENTS' PERCEPTION OF TAXI SERVICES: A SURVEY IN EIGHT CITIES¹

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THE SURVEY

Everywhere in the world, residents want better and cheaper taxi services. But what they mean by better services and how they think prices could be lowered varies widely from one city to the other. These differences underline the specific issues both regulators and taxi operators have to address in each city.

Surveys comparing the quality of taxi services across countries are quite common. In France, every year, the "hotels.com" taxi survey makes the headlines of the newspapers when it comes out. Its press release (¹) specifies: "Research was conducted amongst 1,400 travellers from the UK, Ireland, France, Spain, Germany, Norway, Sweden and Denmark in May 2009." In its last three issues London's cabs were ranked "best in the world". The survey respondents also rate cleanliness, driving skill, knowledge of the whereabouts, friendliness, safety and availability.

Although some of the results of the "hotels.com" taxi survey undoubtedly carry some truth, they are only representative of the opinions of the travellers who make hotel reservations through hotels.com and who are willing to give their opinion. Although hotels.com declined our request for information about their methodology, we could guess that there is no screening of their sample to make it representative of a wider public.

Our own survey differs in two grounds. First, it was addressed to city residents, and not to occasional travellers. These residents were screened to be representative of the urban population of each city in terms of gender, age, and location (centre and suburbs).

Second, besides 40 multiple-choice questions in which respondents had to tick off their responses, our questionnaire included two open questions in which they were asked to give their own opinions on two issues: (i) what reforms would you like your government to implement in your city to make taxi services better cater for your needs and (ii) what are the features of the taxis services you have experienced abroad that you would like to see at home.

What we are presenting here is a detailed analysis of the 4700 answers we got to these two open questions. We already presented an analysis of the 40 multiple-choice questions results in a previous paper (²) given at the last World Conference on Transport Research (WCTR 2010 Lisbon).

The answers we got to the two open questions were very diverse and needed to be coded to allow us to draw some statistics. This we did by devising nine broad themes (better vehicles, better drivers, better service, lower fares, better traffic conditions, more taxis, subsidies to users, tax waivers to operators, others). These themes were in turn divided in up to 9 sub-themes. For instance, the sub-themes for "better vehicles" were: electric car, hybrid cars, non-polluting car, comfortable, air conditioning, physical separation driver / customer, larger taxis (minibus type), single colour (more visible taxis), and better signage for empty taxis.

¹ Paper presented at the 4th International IRU Taxi Forum Cologne, Germany, 5 November 2010

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WHAT SHOULD GOVERNMENTS DO?

Question 25 exact wording was: "What are all the measures that the authorities should put into place so that taxis may be a means of transport that better meets your needs?" and question 27 was: "Thinking again about your taxi trips in another town in your country or abroad, what are all the aspects that you appreciated and that you would like to find during your next taxi trips in your town?"

As an average over the eight cities of our sample, 65% of the persons surveyed wanted governments to do something to make the taxis better meet their needs, and made almost two recommendations each. The most vocal were the residents of Dublin and Lisbon. The less concerned were the residents of Berlin and Stockholm. The question about their experience with taxi services abroad or in other cities drew significantly more respondents, 82% expressed an opinion, as set out in the table below.

	Paris	London	New York	Amster dam	Lisboa	Berlin	Dublin	Stock holm	Average	
Q25. What are all the meat transport that better meets			orities sh	ould put in	to place s	o that tax	is may be	a means	of	
Respondents/contacts	63%	71%	64%	66%	77%	57%	72%	50%	65%	
Responses/respondents	1,9	1,8	1,8	1,9	1,8	1,5	2,2	1,7	1,8	
	Q27. Thinking again about your taxi trips in another town in your country or abroad, what are all the aspects that you appreciated and that you would like to find during your next taxi trips in your town?									
Respondents/contacts	79%	83%	67%	88%	83%	78%	92%	89%	82%	
Responses/respondents	1,5	1,4	1,4	1,4	1,3	1,2	1,6	1,3	1,4	
Note: Significantly higher (green) or lower (yellow) than average at 5% confidence interval Source: IVM survey										

Table 1 - Responses rates to the two open questions of the questionnaire

Dubliners suggested that much improvement should be copied from abroad. Far fewer New-Yorkers expressed an opinion on this question. This itself raising the question whether fewer New Yorkers had the experience of using taxis abroad or that they do not think much could be learnt from foreign taxis? As we will see later, the second reason prevails.

How to improve the quality of the vehicles

On average of the eight cities of our sample, 8% of the persons surveyed wanted better vehicles.

	Paris	London	New York	Amster dam	Lisboa	Berlin	Dublin	Stock holm	Average
Want better vehicles	11%	9%	12%	8%	15%	15%	24%	19%	14%
Vehicles are better abroad	13%	10%	10%	3%	13%	3%	25%	4%	10%
Note: Significantly higher (green) or lower (yellow) than average at 5% confidence interval									
Source: IVM survey									

 Table 2 - Demand for better vehicles

Quality of the vehicles appeared not to be the main concern of Londoners nor of Amsterdam residents. The keenest to ask for better vehicles were Dubliners and the Swedes. But what they meant by better vehicles is quite different. Dubliners want their vehicles to be more comfortable or larger, whereas an overwhelm number of Swedes want non-polluting cars, and some of them specify electric vehicles. Electric vehicles were also demanded in Paris in parallel with the demand, by New Yorkers, for hybrid cars, probably reflecting projects to introduce electric taxis in Paris and hybrid taxis in NYC. Lisbon, residents were keen to see air-conditioned cars and a physical separation between the driver and passengers. Parisian passengers wished for better signage for empty taxis, a requirement shortly to be granted following the granting of a law to make roof signs more visible.

Dubliners seem to yearn for vehicles similar to the London cabs that are larger and (mostly) single coloured. Lisbon residents find the taxis abroad to be larger.

	Paris	London	New York	Amster dam	Lisboa	Berlin	Dublin	Stock holm
Q25. What are all the measures th of transport that better meets your		thorities s	hould pu	ut into pla	ace so tha	at taxis n	nay be a i	means
Electric car	2%	1%	0%	0%	0%	0%	0%	2%
Hybrid Cars	0%	0%	3%	0%	1%	1%	0%	1%
Non-polluting car	6%	5%	6%	4%	9%	8%	2%	13%
Comfortable	0%	1%	2%	1%	0%	0%	9%	1%
Larger Taxis (minibus type)	0%	1%	1%	0%	3%	5%	5%	3%
								0%
Q27. Thinking again about your ta aspects that you appreciated and t								
Non-polluting car	0%	1%	0%	0%	0%	0%	0%	1%
Comfortable	7%	7%	7%	1%	7%	3%	10%	2%
Air conditioning	1%	1%	1%	0%	1%	0%	1%	1%
Larger Taxis (minibus type)	2%	1%	2%	1%	4%	0%	3%	0%
Single color (more visible taxis)	3%	1%	0%	1%	1%	0%	10%	1%

Table 3 - How to improve the quality of the vehicles

How to improve the quality of the drivers

As an average over the cities of our sample, 18% of the persons surveyed wanted better drivers, and 26% thought lessons should be taken from abroad. Obviously, the most dissatisfied with their drivers were the residents of Amsterdam, whilst Londoners remained the least keen to take lessons from abroad.

Table 4- Demand fo	r better drivers
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	Paris	London	New York	Amster dam	Lisboa	Berlin	Dublin	Stock holm	Average
Want better drivers	16%	24%	31%	75%	34%	15%	36%	30%	33%
Drivers are better abroad	40%	31%	46%	38%	37%	28%	39%	32%	36%
Note: Significantly higher (green) or lower (yellow) than average at 5% confidence interval Source: IVM survey									

Looking at the survey results in more details brings forward some specific local issues. Residents in Paris and Amsterdam complain about drivers who refused to accept short rides despite a legislated requirement so to do. Dishonesty was felt a problem with Amsterdam taxi drivers, Amsterdam drivers were also slated as having a poor knowledge of the city whereabouts and driving recklessly. A need was felt for drivers to be more polite and friendlier, and overall, lacking professionalism. London cabbies are exactly the opposite. If we take out the complaints addressed specifically to the minicabs, London cabbies score best on all counts.

Poor grasp of the country's language was an issue in countries where many drivers are immigrants. This is a problem in Stockholm, Amsterdam and New York City, the later being famous for having 88% of its drivers born in a foreign country. Drivers in Lisbon speak Portuguese, but according to the residents' comments, few speak any other language (particularly a lack of English) this being a feature that appreciated abroad felt appropriate for adoption in Lisbon. Dubliners would like their drivers to dress better and have a good presentation. When abroad, Parisians discover that taxi drivers can be kind.

	Paris	London	New York	Amster dam	Lisboa	Berlin	Dublin	Stock holm	
Q25. What are all the measures that	t the aut	horities sl	nould pu	it into pla	ice so that	at taxis n	nay be a	means	
of tra	nsport t	hat better	meets y	our need	s?				
Drivers should accept short rides & penalize ride refusal	6%	2%	1%	5%	1%	0%	0%	0%	
To clean up the profession. Honesty. More control of taxis	2%	10%*	6%	19%	10%	0%	12%	7%	
Improve city network knowledge	0%	2%	4%	13%	0%	0%	6%	7%	
Safer driving, respect speed limits	1%	6%	7%	8%	7%	3%	3%	1%	
That the driver speak the country's language correctly	0%	0%	5%	6%	0%	1%	2%	4%	
Kinder	4%	2%	4%	9%	5%	4%	3%	3%	
Professionalism	1%	2%	4%	14%	10%	4%	4%	6%	
Q27. Thinking again about your tax aspects that you appreciated and th									
Better city network knowledge	4%	7%*	10%	5%	1%	1%	6%	8%	
Safer driving, respect speed limits	3%	3%	6%	3%	5%	0%	3%	3%	
Kinder	27%	18%	22%	25%	25%	25%	21%	17%	
Note: *Most of the criticisms Londoners express are directed at the minicab and illegal cab drivers									

Table 5 - How to improve the quality of the drivers

How to improve the quality of the service

As an average over the cities of our sample, 11% of the persons surveyed wanted the authorities to improve taxi services by changing or enforcing regulation, but only 6% thought lessons should be taken from abroad. Parisians stand out as the most dissatisfied, and their principal demand is for more taxi ranks. As we will see later, this is coupled with a demand for better taxi availability in general.

 Table 6 - Demand for a better service

	Paris	London	New York	Amster dam	Lisboa	Berlin	Dublin	Stock holm	Average
Better service	37%	18%	20%	10%	15%	19%	33%	10%	20%
Service is better abroad	7%	13%	14%	6%	9%	4%	17%	4%	9%
Note: Significantly higher (green) or lower (yellow) than average at 5% confidence interval									
Source: IVM survey									

New Yorkers complain that most of their taxis only accept cash and wish they could pay with credit cards. Together with Dubliners, they yearn for the clean taxis they have seen abroad.

	Paris	London	New York	Amster dam	Lisboa	Berlin	Dublin	Stock holm	
Q25. What are all the measures that the transport that better meets your needs		ities shou	ld put in	to place s	that tax	xis may	be a mea	ns of	
Accept all kinds of payment	4%	1%	6%	1%	2%	0%	5%	1%	
Taxi vehicle condition, cleanliness	3%	1%	2%	2%	3%	1%	8%	1%	
More taxi ranks	21%	8%	6%	3%	5%	9%	15%	3%	
Single taxi call number	0%	2%	2%	1%	1%	1%	2%	1%	
Shared Taxis	6%	4%	2%	0%	1%	4%	1%	3%	
Accept animals	0%	0%	0%	1%	0%	2%	0%	0%	
Help for disabled	0%	2%	2%	1%	0%	2%	2%	1%	
Q27. Thinking again about your taxi trips in another town in your country or abroad, what are all the aspects that you appreciated and that you would like to find during your next taxi trips in your town?									
Accept all kinds of payment	2%	1%	3%	0%	2%	2%	5%	0%	
Taxi vehicle condition, cleanliness	1%	4%	8%	1%	4%	1%	9%	1%	

Table 7 - How to improve the quality of the service

In Paris and Berlin, and to a lesser extent in London and Berlin, shared taxis are considered as a way to better use the limited taxi supply at peak hours of demand.

Lower fare rates

The request most commonly put forward by the residents of the eight cities of our sample is for lower fare rates. Although this doesn't come as a big surprise, it is interesting to note that the differences between cities in the frequency with which residents complain about high tariffs is linear the relative fare levels in terms of purchasing power parity. In a recent study (³), we calculated that highest fares were in London and the lowest, by far, in New York City. Accordingly these two cities come out of the present survey as the ones with the widest difference in the residents demand for lower fares.

Table 8 – Demand for lower fare rates

	Paris	London	New York	Amster dam	Lisboa	Berlin	Dublin	Stock holm	Average
Lower fare rates	62%	71%	40%	68%	68%	56%	57%	41%	58%
Taxis are cheaper abroad	28%	36%	14%	55%	13%	23%	43%	34%	31%

Looking more closely to the details of the residents' requests, some specific differences appear. In Lisbon, residents only want lower fare rates, whereas in Dublin, London and Amsterdam, they want fixed rates for a set of distances so that what they will pay will be predictable, independent from traffic congestion and not an incitement for the driver to take the longest route. In addition Londoners want to be able to share rides to lower the cost of the journeys. Parisians and Berliners would like to be offered subscription (season) cards. Note that in the case of Paris, this demand is ambiguous since taxi companies already sell subscription cards that give some priority when booking a taxi. The market for these "premium" services is a product of the chronic shortage of the taxi supply. What these respondents probably have in mind when they ask for subscription cards is an entitlement to lower rates just like the subsidised *Carte Orange* in the public transport network.

Other requests like price adjustment by time of day or no extra charge for luggage are not frequent enough to be statistically significant.

	Paris	London	New York	Amster dam	Lisboa	Berlin	Dublin	Stock holm
Q25. What are all the measures the of transport that better meets your			should p	ut into pla	ace so th	at taxis r	nay be a	means
Lower fare rates	55%	58%	35%	59%	61%	49%	45%	36%
Fixed rates for a set of distances	2%	4%	1%	4%	2%	2%	5%	1%
Share taxi rides and costs	0%	4%	1%	1%	1%	0%	3%	2%
Subscription (season) card	5%	2%	0%	2%	2%	3%	3%	1%
Q27. Thinking again about your taxi trips in another town in your country or abroad, what are all the								
aspects that you appreciated and that you would like to find during your next taxi trips in your town?								
Cheaper taxis	28%	34%	13%	54%	12%	22%	41%	31%

Table 9 – How to lower fare rates

Another way to reduce the costs of riding a taxi is to ask governments to subsidize riders or to lower the taxes paid by taxi operators. In Stockholm and Paris, and to a lesser extent in Berlin, residents want governments to subsidize or pay back all or part of the fare for the elderly, for the disabled or for the young.

Residents also want governments to reduce taxis' operating costs by exempting taxis from some taxes (especially fuel taxes) or from congestion charges as in the case of Stockholm. Although this makes sense in Stockholm where prices are competitively set, in Lisbon and Berlin where the government sets the tariffs, these tax waivers would probably end up in the pocket of taxi operators with little or no impact on taxi fares.

	Paris	London	New York	Amster dam	Lisboa	Berlin	Dublin	Stock holm
Subsidies	6%	4%	2%	3%	3%	4%	2%	7%
Tax waivers	6%	2%	3%	2%	15%	12%	3%	16%

Table 10 - Subsidies & Tax waivers

How to improve traffic conditions

One request that seem equally present in each city is for the authorities to ease the traffic conditions for the taxis. This can be done by creating reserved lanes for taxis (Paris and Berlin), by enforcing existing taxi lanes (Paris and Dublin), by allowing taxis to use bus lanes (Lisbon and Dublin) or even by limiting the movement of other vehicles (demanded in Lisbon and New York, but certainly not in Paris or Berlin!).

	Paris	London	New York	Amster dam	Lisboa	Berlin	Dublin	Stock holm	Average
Better traffic conditions	13%	11%	13%	7%	13%	12%	19%	12%	13%
Traffic conditions are better abroad	10%	9%	8%	6%	11%	5%	9%	5%	8%

Table 11 – Demand for better traffic conditions

More taxis and better availability

The demand for more taxis in general is by far the strongest in Paris. In New York it is more specific to availability in peak hours and in the suburbs. Parisians also want more taxis at night and weekends (like Dubliners) and want to be able to hail a taxi in the street, i.e. outside the stations.

	Paris	London	New York	Amster dam	Lisboa	Berlin	Dublin	Stock holm	Average
More taxis	33%	21%	23%	6%	5%	4%	25%	5%	15%
Taxis are more									
numerous abroad	19%	9%	5%	6%	3%	1%	10%	7%	8%

Table 12 - Demand for more taxis

The fact that this demand is the strongest in Paris is no surprise if we consider the supply of taxi services in our eight cities according to the right criteria.

We have grouped in the table below the three main indicators to compare supply of taxi services in eight cities in our sample. Cities are ranked according to the criterion of the number of taxi and Private Hire Vehicles³ (PHVs) drivers per 1000 population (last column).

Table 13 – Supply of taxi services in eight cities according to three different criteria

	Population* (million	Taxis per 1000 population	Taxis & PHVs per 1000	Drivers per 1000	
	inhabitants)	1 1	population	population	
Dublin	1,19	10,58	11,15	17,28	
Stockholm	0,77	6,80	6,80	16,99	
New York	8,27	1,63	6,34	11,12	
London	7,56	3,18	8,47	8,60	
Berlin	3,42	2,04	2,28	4,67	
Amsterdam	0,74	2,43	2,43	3,31	
Lisbon	2,02	2,15	2,15	3,22	
Paris	5,90	2,63	2,63	2,76	

Note: * the population is the one of the area serviced by the taxi supply.

Examining this table one can see how misleading the sole criterion of the number of taxis per capita could be. According to this ratio, New Yorkers are the worst off of all the respondents of our sample, however, as we have seen in a recent paper, they are among those who make the most frequent use of taxis, and among those who complain the least about their shortage. At the same yardstick, the Parisians would seem to never stop moaning who, in our investigation, complain of inadequate supply, whereas, according to the taxis per capita criterion, their situation is more enviable than that of the New Yorkers or Berliners.

The ranking is significantly changed if one includes the PHVs in the provision of taxi services or if one considers the total number of both taxi and PHV drivers to reflect the fact that in some cities, cars are used much more intensively. According to this latter criterion, the supply of taxi services would be four times more abundant in New York than and Paris (last column).

What else?

Some respondents answered that they had no special request, implying that they were satisfied by the current situation of the taxis in their city. The same and others mentioned that there was nothing special that should be imported from abroad or that they did not see any difference. Some, however explicitly stated that taxis were better in their own city.

³ Private Hire Vehicles have different names in different cities, in New York they are known as "liveries", in London as "minicabs", in Dublin as "hackneys", in Berlin as "Mietwagen" and in Paris, before they were extinct, as "voiture de petite remise" or "remises".

Table 14 – Is there anything that should be done ?									
	Doris	London	New	Amster	Lisboa	Barlin			

	Paris	London	New York	Amster dam	Lisboa	Berlin	Dublin	Stock holm
Q25. What are all the measures that the authorities should put into place so that taxis may be a means							means	
of transport that better meets you	ir needs?	2						
No special request	6%	9%	16%	4%	2%	11%	5%	9%
Q27. Thinking again about your taxi trips in another town in your country or abroad, what are all the							all the	
aspects that you appreciated and that you would like to find during your next taxi trips in your town?								
Nothing / no difference	22%	23%	25%	19%	36%	34%	13%	21%
It's better in my country	2%	4%	5%	2%	2%	4%	2%	9%

New Yorkers, Berliners and Swedes mentioned they had no special requests, but whereas those in Berliners did not see much difference between home and abroad, the residents of Stockholm were the most numerous to say that they think their taxis are the best.

WHAT DOES ALL THAT SAY ABOUT TAXI REGULATION POLICIES?

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The cities in our sample were chosen so as to present contrasting regulatory frameworks. We can schematically describe these frameworks by presence or absence of three regulatory elements: (i) the fact that the number of taxis is whether or not capped, (ii) the fact that taxi fares are set by the regulator or left the choice of the operators, and (iii) the fact that besides metered taxis the regulator has accepted or forbidden the operations of Private Hire Vehicles (PHVs).

The table below gives a synthetic and simplified vision of the regulation's key characteristics in the eight cities in our sample. Of course, every regulation must be qualified in each city. For example, although the number of metered taxis (black cabs) authorized to pick up customers who hail them in the streets of London is not limited by a quota, but rather access to the occupation of taxi driver is the subject to a highly selective review, the "Knowledge" which has the effect of moderating growth in the number of taxis. Similarly, if taxi fares in Stockholm are left to the free choice of operators, they must nevertheless be filed with the supervisory authority, applied equally to all the taxis that are affiliated to the same telephone-booking centre and clearly advertised on the body and inside the vehicle.

Note that in both cities where fares are free and vehicles not subject to any quota, i.e. Amsterdam and Stockholm, the distinction taxi / PHVs, is irrelevant.

	Taxi number capped	Regulated fares	PHVs allowed
London	No	Yes	Yes
Paris	Yes	Yes	No
New York	Yes	Yes	Yes
Amsterdam	No	No	X
Lisbon	Yes	Yes	No
Berlin	No	Yes	Yes
Dublin	No	Yes	Yes
Stockholm	No	No	Х

Table 15 - Key characteristics of regulation in the eight cities

Although the policy options are generally presented as a dilemma between regulation and deregulation, our survey shows that things are not that simple.

In our sample, Paris and Lisbon seem to present the tightest regulation: taxi number capped, fares regulated and PHVs not allowed. However, the claims put forward by they residents are quite different. In Paris the overwhelming issue is the shortage in the supply resulting from decades of frozen quota. In Lisbon this is not an issue, probably because local authorities allowed the quota to

follow increased demand. Lisbon residents seem quite satisfied with their taxis, although they would appreciate lower fares, newer vehicles and better traffic conditions.

Conversely, Stockholm and Amsterdam come out as the only two cities of our sample where taxis were totally deregulated. Intriguingly they also come out as the ones exhibiting the widest difference in their residents' satisfaction with their taxis services. Amsterdam's residents complain very much about their drivers they think dishonest and poorly qualified. They also complain about unpredictable high fares. To the opposite, Stockholm residents believe they enjoy a good service although they would prefer their drivers to better master the Swedish language and to have a better knowledge of the city's whereabouts. This is probably because in Amsterdam, at the time of our survey, there were both little control to access the profession and fierce competition in the streets. To the contrary, in Sweden, following deregulation, tighter controls were gradually implemented to regulate the access to the profession, and anarchy in fare setting was avoided by imposing a same fare for all the taxis affiliated to the same call centre.

The same contrasts exist between the four cities of our sample where PHVs are allowed, London (minicabs), New York (liveries), Dublin (hackneys) and Berlin (mietwagen). In London, where half the taxi journeys made by residents are in fact minicab rides, they strive along the black cabs as a cheaper alternative only because the black cabs are expensive. In New York where the yellow cabs are cheap, liveries prosper because they enjoy a monopoly over the rides booked by telephone, and their services range from the cheap "car-services" to the more expensive "black cars" mainly working on contracts with businesses. In Dublin, hackneys rapidly developed as long as the cap on the number of taxis was frozen, but immediately after deregulation, they number started a steady decline together with a drive upmarket as luxury limousines. In Berlin, for some reason, they seem confined to subsidized trip for the elderly or the medical treatment.

In London, almost all the grievance about unqualified drivers are in fact directed at minicab drivers while complaints about high tariffs relate to the black cabs.

CONCLUSION

Although their treatment is more cumbersome, open questions are an indispensable complement to surveys on taxi use. Whereas multiple-choice questions allow to draw statistics on trip frequencies, trip purpose, travel habits and preferences and even on the image of the taxi among all the other means of transport, open questions let respondents vent their opinions, their deep feelings, their grievances and their expectations about the taxi services they are delivered. As such, they give policy makers as well as taxi operators valuable feedback information.

References

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