Summary

Taxi regulations in Norway – challenges and alternative solutions

TØI Report 1698/2019 Authors: Jørgen Aarhaug & Kåre Skollerud Oslo 2019 66 pages Norwegian language

The taxi market in Oslo is split between hailing from street and taxi stands, booked trips and contract work. These markets have different properties that in turn result in a series of regulatory dilemmas. One can create an optimal regulation for each market, but a common regulation for all these market segments is dependent on finding a compromise that alleviates the worst outcomes in each market. This report present three alternative, and very different, scenarios which are expected to perform better than today's regulation.

Today's taxi services in Oslo

This report is written based on a study of the Taxi industry in Oslo. This forms the basis for further discussions on how taxis and taxi like services can be regulated in Norwegian cities. In this study, we have not given emphasis to issues in rural areas. That is not because these are less important, but because the knowledge gap in the Norwegian literature is more prominent for urban areas. Also, although the taxi industry is probably relatively more important in rural areas, in absolute terms it is an urban industry.

The Oslo taxi market alone had an annual turnover of approximately two billion NOK in 2017. That is about 25 percent of the total taxi industry turnover in Norway, in a city with about 13 percent of the population. Taxi trips hailed on the streets and at taxi stands constitute a bit more than half of this turnover. Compared with other Norwegian cities this is a high share, as booking a taxi trough an app or by phone through a dispatcher is the dominant ways of hailing taxis elsewhere in Norway.

In Norway, there is presently no legal distinction between a private hire vehicle (PHV) and a taxi. They are both operated using the same license, and both are required to be associated with a dispatcher. Still, the supply side is segmented with taxis associated with some dispatchers focusing on the market for booked trips, while others predominately do street work. In Oslo, the largest dispatcher Oslo Taxi dominate the market for booked trips, but still gain about 40 percent of their revenue from street work. Smaller dispatchers are less able to attract booked trips, and focus their activities on hailing from taxi stands and streets. Taxi licenses in Norway are personal, non-tradable, for one vehicle, and are available for the remainder of the working life of the owner (till 75 years of age). There are some exemptions made from the one man one license rule, in particular in Oslo.

In the Oslo case, there is a history of partial liberalization of the industry dating back to 1998. The current structure has 1 780 taxi licenses and about 90 replacement licenses, distributed on six dispatchers, with a new (the seventh) given clearance to start. This is about 500 more licenses than what was available in Oslo before the liberalization process started, and about 500 fewer than at its peak between 2003 and 2009. An interesting feature of the market is that the street and taxi stand hailing markets are, since 1998, not subject to a maximum fare. This has resulted in a gradual increase in fares, and in the competition between dispatchers focusing on the street segments, setting a high fare is a way of

attracting more license holders. The main limiting factor for this rise in prices is that both dispatchers, license holders and drivers show concern that the fares are high or too high, affecting aggregated demand negatively. They also recognize that the brand facing the customer is 'taxi' and not the name of the individual dispatcher. Further, they observe that for a driver or owner operator the competitors on the street are other taxis, regardless of their affiliation with dispatchers, and public transport. Competition between dispatchers is mostly relevant for booked trips and contract work, and not in the street segments.

Since 2007, the public transport system in Oslo has been dramatically improved. In particular importance for the taxi industry is the increase in night time services. This has had an effect on the demand for taxis, but exactly how much is difficult to estimate.

Complex markets

Taxis are a flexible mode of transport. That is both the main strength and the main weakness of the mode and industry. Strength, as it allows the industry to serve different market segments and customers with very different needs with a single vehicle during a single working day. Weakness, as the concept of taxi is easily overlooked unless something is seriously wrong. In contrast to other modes of [public] transport, taxis are provided at commercial terms, with very little coordination and with decentralized decision-making. It is the person behind the steering wheel who decides where and when the vehicle goes and who is allowed in it.

The key distinction between taxis and other transport markets is therefore that the business decisions to a very large extent is made at the lowest organizational level. There is the interaction between the passenger and the driver. Also, the decision is made at a given point in space and time. As a consequence, many of the standard assumptions made for market interactions do not apply, or are only partially applicable. This is in particular related to the information asymmetry between service provider and customer in the street market segment and at taxi stands, but there are also other reasons why market outcomes may deviate from expectations. In this report, we focus on the services provided to the private customer on a single trip, as opposed to the contract segment where a public or private entity purchases a set of trips to a predefined rate. The private single trip market is further divided into the street segments and booking segment. The street segments include on-street hailing of cruising taxis and taxi trips hailed at taxi stands. The booking segments include all forms of booking, both with an app, telephone or various forms of automated booking.

Street segment taxis have been the focus of regulation and academic debate for a long time, at least since the 1650s. There are economic reasons for this: 1) That customers are unable to make an informed choice between service providers as the price and quality of the service is private information for the provider. 2) The customers are choosing their transport mode, not the individual supplier. As a consequence, repeated purchases happen only by chance. 3) From the driver's point of view, their competitors are all other taxis, regardless of whether they represent the same dispatcher or not. In sum, this means that the individual driver cannot increase his or her market share by lowering prices. A reduced price only means reduced income, no demand gain. Similarly, reduced demand from an increase in fares is directed towards all taxis, and not only the ones who set their prices up. This leaves the policymakers with two options: to somehow regulate fares and quality, or to remove this segment. The latter is probably not a realistic option as any car standing on a curb in the city center or close to a transport hub, will by many potential passengers be regarded as an offer of service available to the public - regardless of legality or regulation.

For booked trips, the markets are much simpler. This is because the passenger relates to a dispatcher, not an individual driver. The interaction between taxi and customer becomes a business to consumer relation. This allows price and quality to be signaled to the customer beforehand. Still, these market segments are not totally unproblematic. Even though there are no economies of scale in providing taxi services, there are significant economies of scale in the connection of taxis and passengers. Consequentially, the largest actor in a given area can easily reach a market dominating possession. Both those who drive and those who want to purchase trips are on average better off connecting to the largest network. The factor reducing the potential to utilize this market power is primarily intermodal competition. As pre-booked trips, at least to a certain extent, are pre-planned, they can be more easily compared with scheduled services. In a city such as Oslo you can probably replace most booked taxi trips by scheduled transport if you have a 15 to 30-minute time window for the trip. As a consequence, the market dominance of the largest actor in this segment is less problematic than the market dominance by the first taxi in the line on a taxi stand.

In the contract market, market dominance is more problematic. Most public contracts are purchased through competitive tenders. There is usually a defined minimum size requirement for offering services on these tenders. This is only to some extent problematic in Oslo, but not the market failure that has received the most public attention. The issue receiving most attention is the failure of some dispatchers to provide vehicles at the price they offered to do contract work, notably for the transport of patients. Drivers are observed to turn down 'discounted' contract trips in order to be available for higher paying trips at taxi stands. The factor contributing to this behavior is the power relation between the dispatcher who submits bids for the tender and the license holders and drivers who decide whether or not to drive. The problem here is the economic dependency of the smaller dispatchers on their license holders. Even though the dispatcher can punish the individual driver for not driving an assigned trip this is very difficult to do as the license holders with credibility can threaten to move their license to a different dispatcher.

Putting these markets together – hailing/taxi stand, pre-booking and contract – it becomes clear that the theoretical best solution for each one of these segments is not the same as in the other segments. As a corollary, there is no ideal solution for all segments together. This is not the same as saying that all solutions are equal. In order to study this, this report utilizes four alternative scenarios for discussing pros and cons of alternative taxi regulation in Norwegian cities.

Scenarios for alternative taxi regulations

The scenarios created are based on the researchers' condensation of four alternatives proposed. Scenario 1 is based on the proposal presented by the government to public hearing in October 2018. Scenario 2 is a combination of the reforms in Denmark and Sweden. Scenario 3 is a stricter needs test based regulation, based on the 'old-system' pre-1998. Scenario 4 is created based on input from interviews with drivers, and takes an employee point of view. Together with these alternative scenarios today's situation in Oslo is presented for comparison.

Scenario 1, includes to stop the possibility of having local regulation on the number of taxis. It removes the sole-proprietorship requirement and in extension the link between a single owner and single vehicle, the requirement to be associated with a dispatcher is removed, and there is substantial easing of the regulation regarding how vehicles shall be marked and the requirement for a taximeter.

Scenario 2, includes a partial removal of the needs-testing system and requirement for soleproprietorship, but also a continuation of the requirement for the license holder to be connected with a dispatcher, stricter regulation regarding how vehicles should be marked, stricter taximeter requirements, and a maximum fare for all trips hailed on streets and taxi stands.

Scenario 3, includes a stricter needs-test, continuation of today's system of soleproprietorship and taximeter requirement, but with a stricter regulation on the number of dispatchers allowed, stricter requirements on vehicle markings and a maximum fare for street and taxi stand trips.

Scenario 4, includes no needs-test, and the abolition of today's requirement for soleproprietorship, which is replaced by a requirement to form corporations. These are responsible for the licenses and vehicles and have a requirement to have employed drivers with a hour based payment. The companies have a minimum size.

Today's situation, is characterized by a partial needs-test, no maximum fare, and it is relatively easy to introduce new dispatchers, in terms of the number of licenses required.

In the report, these scenarios are discussed related to the customer's interest in the different market segments, the effect on working conditions and the local authorities' possibilities to control and influence the industry. That is collecting taxes, controlling the compliance to local vehicle standard regulations, and that safety and security regulations are followed. These findings from these scenarios are synthesized in table S.I using a red, orange, yellow, light green, dark green, color scale. Red is least beneficial, and dark green most beneficial.

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Todays' situation
Street and taxi stand					
Booked trips					
Contract					
Working relations					
Control					

Table S.1: Summary of scenarios.

In summary, this table illustrates that all the possible solutions have their strengths and weaknesses. In order to solve the issues in one market, there will be issues in other markets, so there is a need to compromise between the different groups' interest. However, scenarios 2, 3 and 4 perform better than both scenario 1 and todays' solution.