

## **Comment on Frode Steen and Lars Sørsgard: From a regulated duopoly to a private monopoly: The deregulation of the Norwegian airline industry**

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Steen and Sørsgard describe the development of the Norwegian domestic market for air travel in detail. They present a large number of factors underlying the transition of the major routes from regulated duopolies to private monopolies. The major Norwegian domestic routes are, however, once more characterised by duopoly, since Norwegian Air Shuttle inaugurated services in competition with SAS on the four busiest routes in September 2002.<sup>1</sup>

The most interesting part of Steen's and Sørsgard's paper is the discussion about large customer contracts. It is, above all, in this respect that the paper is an important contribution to our general view of airline markets. The paper shows the importance of taking the effect of such contracts into account when analysing air fares.

This comment discusses large customer contracts, frequent flyer programmes, infrastructure charges and airport handling as well as the consequences of using data that are, to a large extent, confidential.

### **1. Large customer contracts**

The section on large customer contracts is a major contribution, bringing new and important information on pricing practises in the airline industry. However, a full treatment of the subject would probably call for a separate paper incorporating a richer model, which explicitly handles duopoly competition. The simple model used now is a monopoly model, whereas *duopoly* competition is the main topic of the paper.

The size of the large customer discount is exogenously given in Steen's and Sørsgard's model. They defend this assumption by arguing that its size is determined in negotiations *ex ante*, whereas the deci-

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<sup>1</sup> The reported monthly load factors of Norwegian Air Shuttle since September 2002 until February 2003 have been around 50 per cent. Based on experience, these load factors seem too low to support long-term survival.

sion on how much to travel is taken ex post. According to the simple model, the optimal strategy for the monopolist would be to offer no discounts at all ex ante. The existence of these discounts should therefore be seen as a result of duopoly competition.

The authors write that the carriers were able to collude on prices via the interlining pricing system. The interlining system is generally much more relevant for international travel than for domestic travel. This would call for a special motivation by the authors of the domestic relevance. Furthermore, it seems more likely that the possibility to monitor price changes via the electronic reservation systems is a more important reason why collusion on the so-called C-prices could be sustained. In an infinitely repeated basic Bertrand price game, the length of the period that the firm deviating from a collusive price can earn extra profits is critical for the existence of a collusive equilibrium. The reservation systems are important in this respect, as they offer more or less instant access to prices. It thus seems like the effect of the interlining system may be more important in coordinating towards a “focal equilibrium” than in directly supporting collusion. It is also worth noting that the collusion on C-prices continued when price competition emerged via the large customer discounts. Put differently, the secrecy of large customer contracts reduced the possibility for firms to observe the actual prices of their competitors and thus made actual collusion impossible to sustain, while collusion on one specific price category (C-prices) could continue.

## 2. Frequent flyer programmes

The authors take a positive view regarding the regulatory decisions in Sweden, Germany and Norway to reduce the suggested anti-competitive effects of frequent flyer programmes (FFPs), even though theory gives no clear answers as to how FFPs should be judged from a welfare point of view. The view taken by the authors is defensible, but the danger is that the mere number of authors arguing that FFPs should be counteracted will establish a truth about the welfare damage of FFPs. Hence, there is a need to emphasise the lack of definite answers on the welfare effects of FFPs.

Another aspect linking FFPs and large customer contracts which may be worth exploring, is that large customer contracts may be seen as a way for large customers of reducing the possible market power obtained by airlines via FFPs. These contracts give large customers an

opportunity to use bargaining power to shift power from airlines to customers.

Steen and Sørøgard also write about the problem that in many cases, the traveller is another economic agent than the customer who pays for the ticket. In that case, FFPs are likely to lead to excess consumption of air travel. If this were an important problem for firms with employees travelling on their behalf, then these firms could introduce a control mechanism forcing the business travellers to collect points on FFPs, which the employer could monitor. The right to earn points for private travel can thus probably be seen more as a fringe benefit, which is exempt from taxation and thus considered as advantageous by both the employer and the employee. This fringe benefit may, of course, have negative effects on overall welfare and is probably also considered as a non-wanted effect for the tax collector.

### 3. Infrastructure charges and handling

Steen and Sørøgard suggest that infrastructure charges could be reduced with entry or even be asymmetric in size to induce entry. If one has to take such measures as different charges according to market shares, then one definitely takes a step away from the basic ideas of deregulation of aviation as a way of creating a fair playground for all firms. It may be the case that it is beneficial to regulate (small) airline markets, as competition may not be sustainable, but once that view has been taken, there are, from an economic point of view, several alternative regulatory approaches other than those presented in the paper.

Steen and Sørøgard also propose a differentiation of charges according to the service level. The most obvious item to use for differentiation is remote parking as opposed to gate parking with passenger access via air bridges. As an example, the low-cost-no-frills carrier Ryanair does not use the existing air bridges at London Stansted airport. The Swedish Civil Aviation Administration has examined this issue and found that remote parking is actually *more* expensive than using air bridges, which makes it impossible to use this item as a basis for a meaningful differentiation of user charges, if the principle of strict cost-relatedness of charges should be followed. In theory, it could still, in some cases, be welfare-improving to differentiate charges based on parking conditions, but this will depend on the net effect of the production inefficiency of introducing this “bad” (re-

mote parking) and the possible welfare-improvements of having a potentially more efficient price discrimination.

The authors also call for handling independent of the carriers. Most airports in Norway are relatively small, which means that, in general, the market cannot efficiently support more than one handling agent. In many cases, only one airline is operating scheduled services to such airports. If the firm providing handling services is required to be independent from the air carriers, then there is a risk that there will be both an upstream monopolist providing handling services and a downstream monopolist providing air travel. The inefficiency stemming from consecutive monopolists in a production chain can, in principle, be eliminated by mergers or, in this case, by letting the air carriers handle their own aircraft. A requirement for independent producers may therefore lead to inefficiency through “double marginalisation”.

#### 4. Confidential data

Dahlberg and Johansson (2002) stress the need to release the full data sets when publishing scientific articles in order to ensure a high level of credibility and the possibility of performing replication studies. According to them, it seems to be hard to get access to the original data sets in many cases. Scientific journals face a trade-off, of course. By requiring the authors of scientific articles to make data publicly available, the possibility for the research community of examining published results would increase but, at the same time, authors who have had access to confidential information would not be able to present interesting results.

This problem is evident in the Steen and Sørøgard paper, as it is largely built on confidential information from the two airlines SAS and Braathens. In particular when discussing large customer contracts, it is very hard to judge the results given. One can, in many cases, reveal how the data have been processed, release summary measures such as dispersion, number of observations and so on, without revealing important corporate information. These kinds of summary measures are often given in papers using publicly available data, but the need for such information is even greater when the original data set is confidential.

It would thus have been very useful if the authors had provided the reader with some quantitative measures indicating the importance

of large customer contracts. Steen and Sørøard mention that the number of contracts doubled to 300 from 1998 to 2000, but that does not say anything about the share of passengers using these contracts. The authors do not reveal any figures on the sizes of the discounts in the data they have used. The only information on this is a reference to a wide interval (5-50 per cent) reported in *Dagens Näringsliv*.

### References

Dahlberg, M. and Johansson, E. (2002), Släpp dataseten fria! (Release the data sets!), *Ekonomisk Debatt* 30, 663-664.