



UiO : **Universitetet i Oslo**

Loyalty Programmes

An Evaluation of the Basis for a Further Ban On Loyalty Programmes in the Norwegian Domestic Airline Industry

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Outline

- Is there a basis for a further ban on loyalty programmes in the domestic airline industry?
 - in general
 - in part (cf. The Norwegian Competition Authority's recommendation)
- Issues
 - empirical evidence
 - theory
 - the principal-agent problem
 - individual routes

1. Empirical Evidence

- Impact on travellers
 - choice of airline
 - choice of ticket
 - travelling frequency etc.
- Impact on airlines
 - services, quality
 - prices
- Impact on competition
 - entry
 - concentration, market shares

Development of Competition

- The rise of Norwegian parallels ban on loyalty programmes
- Other explanations for Norwegian's success
 - timing, competition, business model, skill
 - other government interventions (ban on quantity discounts and exclusive dealing, government contracts)
- Norwegian has succeeded also where there is no ban on loyalty programmes
 - international flights in and out of Norway
 - domestic flights in Sweden
- Parallel to development of other low-price carriers
 - however, these operate in competition with established airlines with loyalty programmes
 - often with more competition even though number of passengers is lower than on many Norwegian routes

Impact on Competition

- Studies by Steen and Sørgard for the Competition Authority to identify price and quantity effects of loyalty programmes (*in casu* SAS Eurobonus)
- Will to identify possible effects
 - the Competition Authority: *"hadde forventninger om at resultatet av de empiriske undersøkelsene ville gjøre det mulig å kvantifisere noen av virkningene av bonusprogrammene på konkurransen i norsk luftfart"*
- Careful studies
 - large and comprehensive data sets
 - modern econometric methods
 - very competent researchers
- The absence of clear results cannot be attributed to lack of determination, thoroughness or comprehensiveness

Methodological Challenges

- Covariance between numbers of loyalty programme members and business travellers
 - *"i så måte ville man vente at vi kanskje til og med overestimerte effekten av innelåsing gjennom vår innfallsvinkel, noe som er overraskende når vi allerede finner relativt små effekter"*
- Amount of data and their relevance
 - *"mangelen på brukbare data på bonusandeler på norsk innenriks umuliggjør en ordentlig test av bonuseffekter i Norge"*
 - the same is true for the indirect tests on domestic routes in Sweden and international routes
- But, if there were strong effects, we would expect them to show up
 - no effect in most tests
 - in other tests, effects are sometimes the opposite of expected (*"Av 12 mulige ... er 6 positive og signifikante, 2 ikke signifikant forskjellige fra null, og 4 er signifikant negative... det siste representerer et tolkningsproblem"*)

Impact on Travellers

- Empirical studies limited to loyalty
 - Steen and Sørsgard found no effects on choice of ticket type
 - other effects on travellers not considered
- Copenhagen Economics found that the gold card threshold affected fewer than 1000 or 0,5% of travellers in the Nordic countries
- Steen and Sørsgard get a similar result
 - critical to Copenhagen Economics' method and reference point
 - double counting?
- Not surprising that loyalty programmes have effect, but they are small
 - more flexibility in how to earn and use points and their reduced value may provide explanations
- The Competition Authority's conclusion appears unfounded: *"den lojalitetsskapende effekten av bonusprogrammene fortsatt betydelig, all den tid opptjeningsstrukturen i bonusprogrammene fortsatt motiverer til kjøp av flere og dyrere billetter hos ett selskap"*

Empirical Evidence - Conclusion

- Norwegian Competition Authority: *"det er vanskelig å trekke klare konklusjoner"*
- Steen and Sørgard: *"vise en viss forsiktighet når vi evaluerer modellene"*
- But the conclusion seems clear: there is no empirical basis for arguing that loyalty programmes have had – or, for that matter, have or will have – decisive impact on competition in the Norwegian domestic airline industry!
- Consequently, conclusions about the impact of loyalty programmes must rest on theoretical arguments

2. Theory

- Can theory inform us about the likely impact of a ban on loyalty programmes?
- Impact on
 - competition between established airlines
 - entry
 - exit and capacity reductions

The Competition Authority's View

- *"Opptjeningsstrukturen i bonusprogrammet påfører kunden en ekstra kostnad ved å velge et konkurrerende selskap slik at kundene blir "låst inne" hos sitt opprinnelige selskap. Innelåsningseffekten fører til redusert prisfølsomhet, redusert konkurranse og dermed økte priser på flyreiser.*
- *Bonusprogram kan også skape etableringshindringer for nye aktører. Innelåsningseffekten innebærer at det ikke er tilstrekkelig for en ny aktør å tilby et marginalt bedre produkt enn selskapet med bonusprogram for at kundene skal velge den nye aktøren. Dette skaper en utestengende effekt i forhold til potensielt like effektive aktører."*

Consumer Behaviour and Airline Strategy

- The Competition Authority assumes that
 - the relevant product is individual flights
 - travellers only makes decisions about which airline to travel with
- More fruitful to see the relevant product as a travelling programme: the consumer chooses a collection or series of flights, taking account of airlines, routes and other services
- Airlines compete both on travel programmes and individual flights
 - travel programmes may increase consumer choice and hence competition
- The literature on activities to increase loyalty and switching costs (incl. loyalty programmes) does not provide clear results on competition
- Efficiency reasons for packing different products together
 - transaction costs (for traveller and airline)
 - price differentiation (covering fixed costs)

Impact on Entrants

- Lock in has two opposing effects
 - difficult to attract travellers on loyalty programmes
 - weaker price competition from established airlines
- Therefore not given that loyalty programmes make entry more difficult
- May explain why low-price carriers have succeeded so well also where loyalty programmes are prevalent
 - aim at the most price-sensitive segment, which has little interest in loyalty programmes, and is growing rapidly
 - established airlines have attempted to protect margins on loyal customers, and so have limited ability to compete on price

Capacity Reduction and Exit

- The Competition Authority: *"En eventuell gjeninnføring av bonusprogram kan føre til at selskapet med det mest attraktive bonusprogrammet tiltrekker seg kunder på bekostning av selskap med mindre attraktive bonusprogram. Dette kan føre til at selskapet som taper kampen om bonuskunder vil redusere antall avganger eller trekke seg ut av strekninger."*
- No support for this view in the literature
 - weaker competition between established airlines
 - potential entry barrier
- Also no empirical support for this view
 - never been demonstrated in practice
 - The Competition Authority's own studies (Steen and Sørgard) do not find asymmetric effects
- In conflict with the prevailing view in the literature on the effect on competition between established firms
 - in the Competition Authority's model analysis this effect is neglected

3. The Principal-Agent Problem

- The Competition Authority: *"I forretningssegmentet er det typisk arbeidsgiver som betaler arbeidstakers reiseutgifter mens fordelene ved et bonusprogram tilfaller sistnevnte. I slike tilfeller kan det oppstå en interessekonflikt mellom arbeidsgiver og arbeidstaker."*
- Private element in many employee decisions, including travel
 - bonus points just one of many elements
 - if there is a loyalty problem, it is independent of loyalty programmes
- The Competition Authority and SAS surveys show that
 - employers have routines for travel bookings
 - earning bonus points for private use is not considered a problem
- Most companies (but not all) allow private bonus
 - presumably view routines as sufficient to avoid misuse
 - membership advantages make travels more efficient
 - value of bonus points small (gold card corresponds to ticket of NOK 2.000)

4. Analysis of Single Routes

- Is a ban on loyalty programmes required on single routes – if so, which?
- Issues
 - market definition
 - market size and competition
 - impact of loyalty programmes on single routes

The Competition Authority's Model Analysis

- Models impact of introducing loyalty programmes on domestic routes
- Impact modelled by change in preference parameter
 - 1 = no difference between SAS and Norwegian, 0 = max preference for SAS
 - 0,75 in base case (calibrated on cabin factor and share of business travellers)
 - set to 0,5 (“forsiktig anslag på virkning av bonusprogrammer”) and 0,3 (“større skift i preferansen for SAS”), respectively
 - correspond to reduction in demand for Norwegian of third and half, respectively
- No explanation for the asymmetry
 - *“Norwegian ... har antagelig ikke et like attraktivt bonusprogram som Eurobonusprogrammet”*
- Disregards other effects
 - loyalty effects on price competition
 - willingness to pay for new services
 - no effect in the model if impact was symmetric

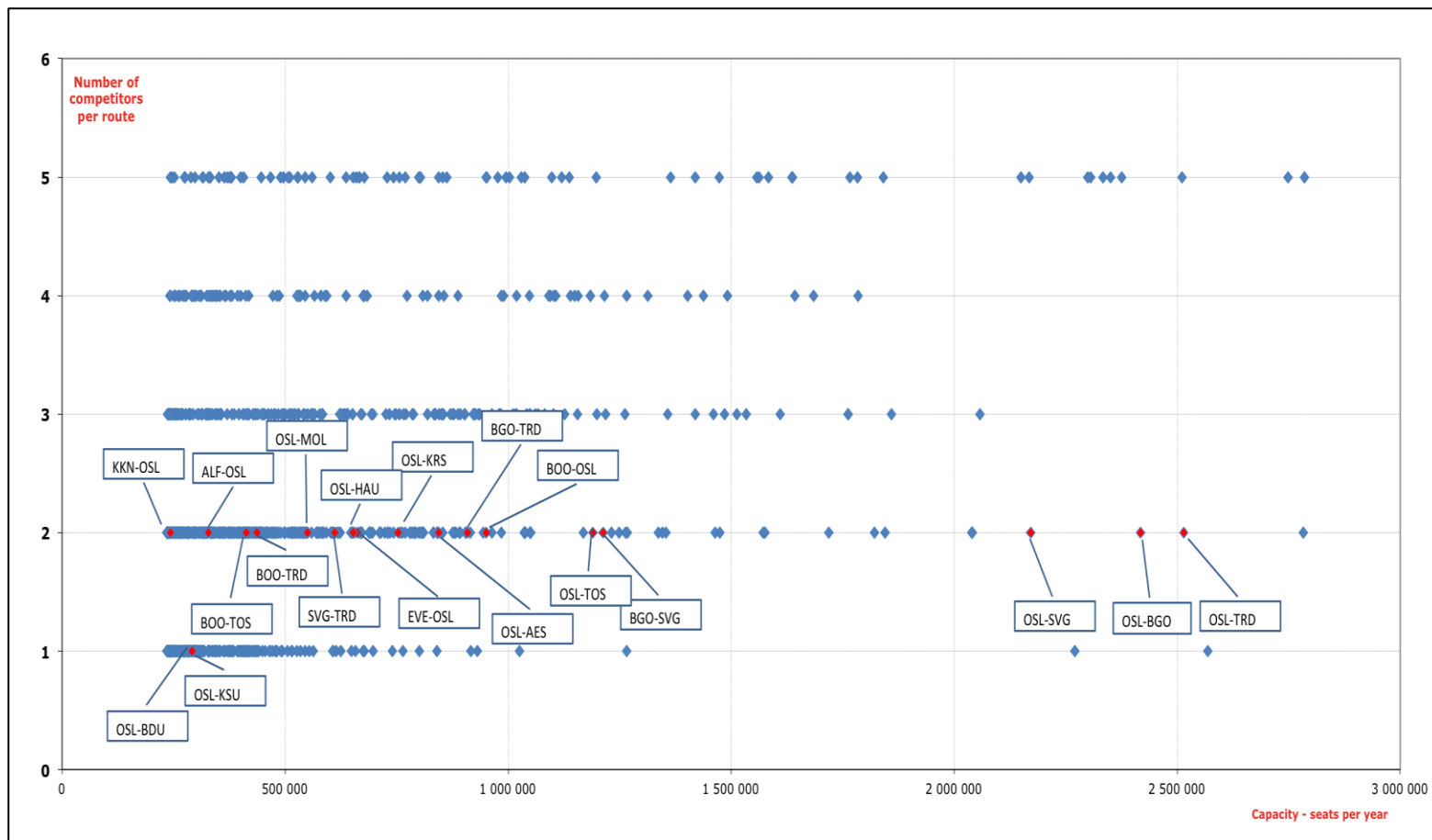
Model Analysis cont.

- Relevance of the model
 - assumption about mode of competition unreasonable and out-dated
 - assumptions about demand, costs and other elements hard to justify
 - parameters set by calibration, involving considerable discretion and arbitrariness
- The results
 - The Competition Authority: *”Simuleringene på den lille modellruten som illustrerer små ruter viser imidlertid at selv en liten overvelting kan medføre at lønnsomheten til Norwegian forverres betraktelig.”*
 - reduction in revenues of 2,2 per cent
 - turns surplus to deficit, but only because starting point is close to nil
- The model analysis seems to have been important for the Competition Authority’s conclusions

Market Size and Competition

- The Competition Authority consider the danger of reduction in supply to be particularly great on small routes: on the three main routes competition is “forholdsvis robust”
- No real reason provided for such a distinction
 - number of passengers
 - model simulations
- Empirical evidence does not provide support
 - no relation between size (capacity) and competition (number of airlines)
 - no clear lower “critical” bound for workable competition

Capacity and Number of Competitors



Costs and Mode of Competition

- No relation between market size and concentration
 - small routes with three, four and five airlines
 - large routes with one or two
- Potential explanation
 - small economies of scale
 - strong price competition
 - accommodation of frequency and capacity
- In such a market, the number of competitors becomes arbitrary
 - not necessarily many airlines, even when room for such
 - many airlines if presence in the market is important
- The Norwegian domestic routes stand out with
 - few competitors even though capacity/number of passengers is large
 - ban on loyalty programmes

Conclusion

- Causal relation between ban on loyalty programmes and degree of competition on Norwegian domestic routes has not been demonstrated
- No hard evidence to suggest that lifting the ban will undermine competition
- It is not possible to draw a line between routes where competition is sufficiently robust for loyalty programmes, and where it is not
- The Competition Authority's evaluations are based on an understanding of loyalty programmes that is potentially misleading on impact on airlines and travellers
- The empirical studies are comprehensive and thorough, but essentially without results on the impact of loyalty programmes
 - little impact on travellers
 - employers do not consider loyalty programmes a problem, but value benefits for their employees
 - no indications that loyalty programmes are anti-competitive
- Recent developments
 - stronger competition, both on domestic and international routes
 - more travellers, especially in segments where loyalty programmes are unimportant
 - bonus points less attractive (because of cheaper tickets)
 - stricter company controls on business travelling