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Deregulation of the Norwegian long distance express coach market

Abstract

This paper offers new insight to the effects of long distance express coach deregulation in Norway, which formally happened gradually between 1998 and 2003. We study data over a period that spans from the years prior to deregulation and up to 2010. We document the degree of both competition and cooperation in the market, which has taken a particular form in Norway due to historical requirements on coach operations. We also document that the market has changed character as a consequence of intermodal competition, in particular with air traffic. Our paper documents the successful development of an often neglected public transport mode, which has the potential to make long distance passenger transport more efficient more sustainable, and with hardly any subsidy requirements.

Keywords

Express coach; Deregulation; Norway

1 Introduction

The Norwegian geography offers long distances, mountainous landscapes, deep fjords and bendy roads. Still, its demography demonstrates a history of political commitment to allow small and remote countryside communities to thrive. Apart from its major cities, Norway is a country that is hard to serve by high capacity public transport, like rail. However, scheduled coach services were for a long time strictly regulated in order to protect the railways. Before 1998, it was the responsibility of coach companies to prove that they were not in competition with the railways, in order to obtain licenses to operate – similar to the requirements in Germany (Walter et al., 2011). In the 1980s, most express coach routes were extended local routes, and local bus companies operated most of them.

Operators with area licenses in neighbouring counties cooperated and joined their licenses in order to operate through-services. Such cooperation was a de facto requirement for establishing express coach routes (Leiren and Fearnley, 2008). This regulation was first lifted in limited areas in 1999 when consideration of passengers' benefit became the important consideration. Then, in 2003, entry regulation was abolished all together, for county border crossing services, as is the official term (Leiren et al. 2007).

This paper studies the impact of these reforms and the subsequent EU-regulation 1370/2007 (EC, 2007) on the Norwegian express coach market, also drawing on experience from Sweden and the UK. We do so by analysing longitudinal data obtained from the express coach companies (service levels, demand and financial information); the national confederation of operators (ownership, mergers, buy-outs, acquisitions, entry and exit); county authorities and central

governments (information about integration with local public transport, subsidies and contract award procedures); and interviews with key persons in the industry and public sector, in 2011. The main source is data collected as part of Aarhaug et al. (2011), a rich selection of statistics and developments of the industry in the period after year 2000. We also draw on analyses and data collected as part of work leading to Aarhaug and Fearnley (2012), Aarhaug et al. (2011b), and Alexanderson et al. (2010). Aggregation of these data has been a necessary due to the clause in using them. We do not, therefore, present local or disaggregate data.

The Norwegian term “express coach” was introduced by the industry. It describes Norwegian county border crossing bus transport, i.e. a bus which serves two or more of Norway’s 19 counties. This is similar to the definitions used in, e.g., Italy and Sweden, although the latter also includes a minimum route length of 100 km (van de Velde, 2009), but differs from definitions that purely relate to route length, as in the UK (>15 miles) and Finland (>250 km). The typical Norwegian express coach has a high average speed and few stops compared with local bus services, and is mainly operated on a commercial basis.

Our paper starts out by providing a short description of the theoretical and empirical background for the paper. Then, we describe the historical development in the industry. Finally, we discuss the Norwegian developments in a national and international context looking at explanations for the observed effects, and conclude the paper by pointing at some general lessons that can be learned from the Norwegian experience.

2 Theoretical and empirical background

Passenger transport markets in general are characterised by relatively strong levels of state interventions, relating to two fundamental issues, (i) market failures and (ii) the dissatisfaction of the market outcome from a socio-political point of view (Van de Velde, 2004). However, in this paper we look into a market that has been allowed to evolve as a result of a relaxing of the regulatory measures typically introduced to correct the undesired market outcome (like exclusive rights, entry restrictions and price regulation). In a sense, this puts the express coach industry as a new technology being introduced. The reason for it not being introduced earlier is, however, restrictive regulations and not new technology. Looking at the express coach industry in this way, we see many similarities with the growth to maturity of a new transport mode, as described by Garrison and Levinson (2006).

The availability of international experience with express coach deregulation and liberalisation from other countries is limited. White and Robbins (2012) revisit their 1986 review of express coach deregulation in England, Wales and Scotland. They find that the markets, followed by an initial period of price and frequency competition, and growth, are dominated by one major operator and relatively stable levels of service and patronage. Alexandersson et al. (2010) observe about a decade after the 1998 Swedish long-distance coach deregulation that the express coach market is dominated by privately owned coach operators running services to and from the capital Stockholm. Their service and patronage levels are relatively modest, although some growth is observed in the late 2000s. (Since then, a wider deregulation was introduced in Sweden in 2012, which relates in

particular to local passenger transport.) Swebus is the dominating operator with a market share of about 50 percent (Aarhaug and Fearnley, 2012). It is too early to evaluate any further effects of the full deregulation of Swedish public transport, which totally opened the market for commercial services anywhere in the country, which entered into force in January 2012. Italy opened its national interurban market progressively between 2007 and 2013, with the market fully opened 1-1-2014 (van de Velde, 2013, Beria et al. 2014). Therefore, it is probably too early to evaluate impacts in Italy, too. Beria et al. (2014) point at many companies that have entered the market, but that most of the lines offered are with low passenger volumes, and low frequencies. They also notice regional variation between southern and northern Italy in terms of which services are offered. The transformations that followed the end of the Communist regime in Poland cannot easily be compared with the express coach liberalisations that took place in other Western European countries. Tylor and Ciechanski (2008) describe a stepwise process of deregulation which started prior to the Polish Communist fall in 1990. The process started with liberalisation of road transport and commercialisation and later privatisation of state-owned companies following the 1988 Economic Activity Act. Further liberalisation and deregulation took place between 1998 and 2000, after which some fierce competition in the market has taken place. Still, almost all regular coach services are provided by the former State Road Transport (PKS) companies. PKS was split into a larger number of branches during the 1980s and 1990s, a few of which have been acquired by international operators (notably Veolia). Passenger numbers and passenger revenues have declined steadily despite the deregulation – mainly because of the great expansion in individual motoring (Tylor and Ciechanski, 2008). In Germany, the

market for long distance bus lines has been opened from January 2013. In the wake of this, there has been a rapid expansion of new services, with a large number of new entrants into the market (Augustin et al. 2014). The traditional dominant actor, Deutsche Bahn's bus services, has reduced its market share, as the total volume of the long distance coach market has increased.

3 Historical developments

In 2012, the Norwegian express coach industry was dominated by the marketing company Nor-Way Bussekspress (NBE), which is owned by some 20 plus coach companies and which dominated the express coach market since the first coach services were introduced. NBE does not operate any coaches themselves, but it markets their services. NBE was established well before deregulation with operations targeted at areas without rail service.

3.1 Rapid growth following deregulation

Figure 1 illustrates the development in the number of passengers transported by the express coach industry in Norway in the period 1990 to 2006 for a limited number of routes. This figure presents data from selected routes studied in Leiren et al. (2007). These routes were selected in order to give a representative picture of the Norwegian express coach industry, but only connecting data on one in four

lines¹. The figure illustrates that before the first round of partial deregulation, there were already some few lines in operation. These include lines that were established as a substitute for closed railway lines, or in areas without railways. In many communities, these express coach lines constituted the only public transport service available. The first round of partial deregulation took place around 1998 and, as the figure illustrates, it resulted immediately in increased traffic. This growth is mainly a result of the introduction of new express coach routes. The next shift came in 2003, when the entry regulation was removed entirely and passenger numbers more than doubled almost overnight.

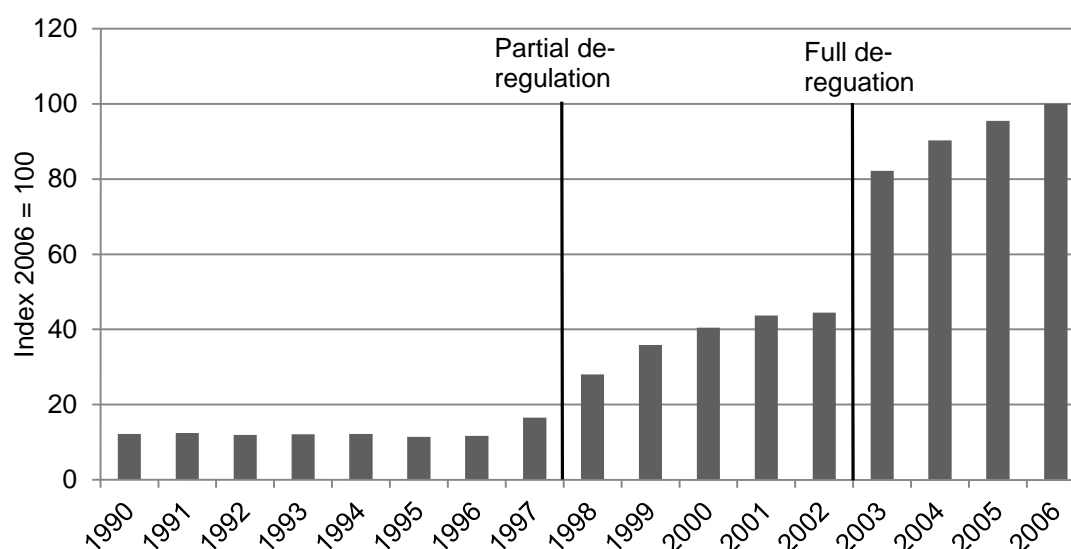


Fig 1 Index of passenger development, selected lines. 2006 = 100 (Data Source: Leiren et al. 2007)

¹ The lines are, Oslo-Trondheim, Oslo-Kristiansand, Oslo- Måløy, Oslo- Bismo, Oslo-Årdalstangen, Oslo- Beitostølen, Oslo-Skien, Oslo-Porsgrunn, Stavanger-Kristiansand and Bergen-Stavanger.

3.2 Consolidation follows growth

The post-deregulation growth is also clearly evident in the newer and more complete data, presented in Figure 2. However, this data also shows that the growth halted in 2007/2008. Looking at the composition of traffic, it is clear that most of the volume growth has taken place on the shorter lines. The dominant factor behind this development is the TIMEkspresen concept, which Nettbuss introduced. This concept was introduced already before deregulation, but the deregulation allowed it to expand into many more communities. It consists of relatively high frequency services mostly targeted at the frequent traveller and commuter segments around some of the larger cities in Norway. The original concept had one departure per hour, 24/7, hence its name TIMEkspresen, but this has been modified with more departures on high volume times and fewer departures at night, but never less than one bus every second hour. The vehicles that operate on these services have a unique paint scheme, and the brand "TIMEkspresen" is used extensively in marketing. The service uses new, but conventional, high quality coaches and a traditional pricing scheme with a limited pre-pay possibility.

The more traditional, longer lines, connecting different regions, have not enjoyed a similar growth, but also this line network has expanded.

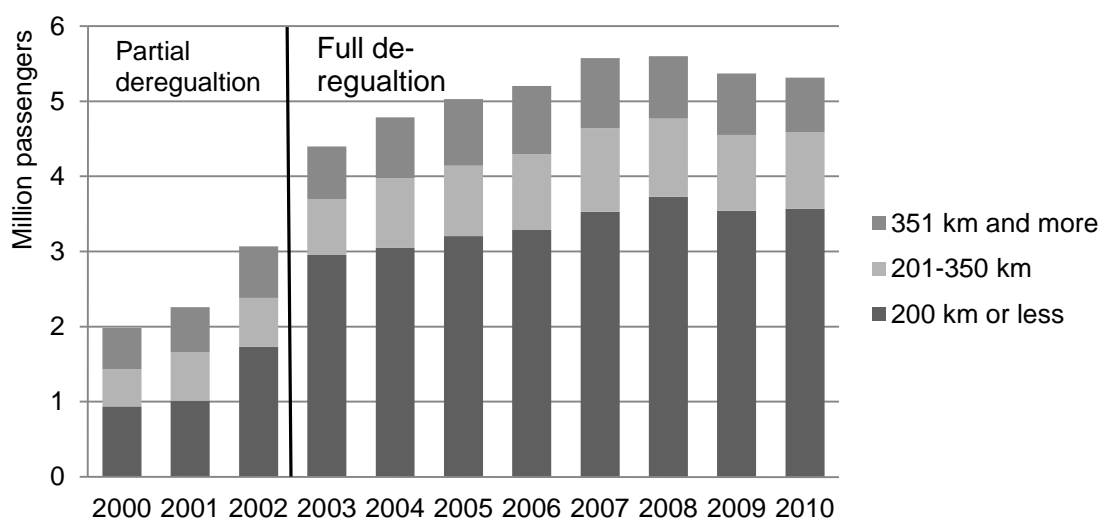


Fig 2 Millions of passengers travelling by express coach in Norway, by route length (Source Aarhaug et al. 2011a).

The number of lines operated show a similar development (table 1).

Table 1 Number of express coach lines in operation.

Year	Number of lines
2000	14
2001	16
2002	20
2003	26
2004	29
2005	30
2006	33
2007	37
2008	36
2009	36
2010	36

3.3 Fewer active companies

As shown in figure 3, there were some 30 coach companies operating express coach lines in 2001, before the full deregulation. Most of these were smaller companies marketing their lines under the NBE umbrella, and operating the lines as joint ventures. This industry structure existed as a result of historical factors (see above). By 2015, the number of companies that operate express coaches is reduced to 12 (when fully owned companies are registered as part of their parent company). During this period, passenger numbers more than doubled (cf. Fig. 1) while at the same time the number of companies fell to less than a half.

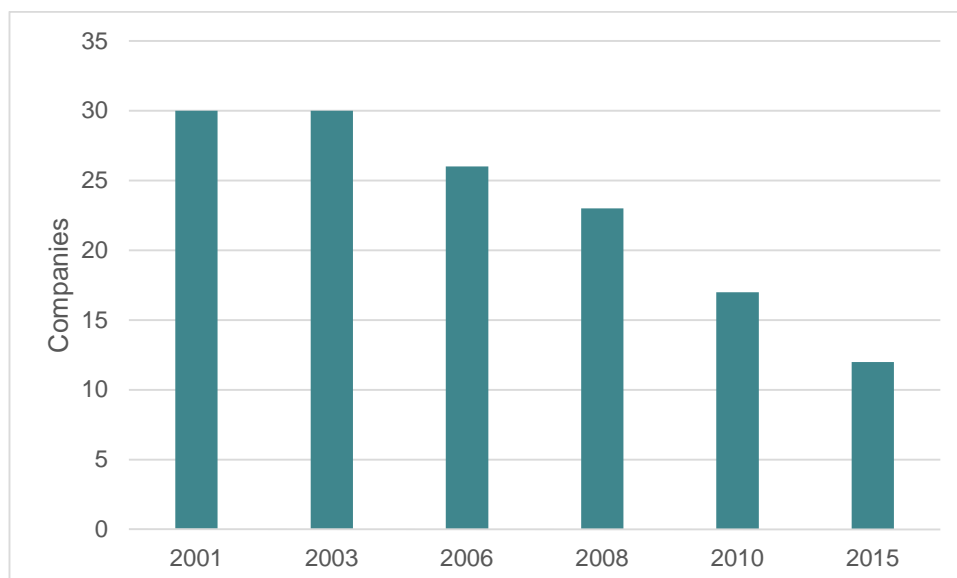


Fig 3 Number of companies operating express coach lines (Sources: Rutebok for Norge, NHO Transport, TØI).

Looking behind the post 2003 developments, the trend is for smaller companies to be acquired by larger companies, and that companies with a history of operating lines together in joint ventures, merge. The operation of express

coaches has become more of a side-activity to the operation of subsidised local bus services. In fact, none of the 2015 companies has express coach operations as their sole activity, although one smaller company combines express coach operations with charter services only (konkurrenten.no). Express coach services are still mainly provided under the NBE umbrella or by Nettbuss outside NBE.

In parallel with the developments in the express coach industry, there has been a change in the organisation of the subsidised local bus services. The main development has been a move from local companies operating on negotiated contracts, towards competitive tendering (Longva and Osland, 2008). This is largely a result of (the then anticipated) EU Regulation 1370/2007, which entered into force in December 2009. In this process, there have been a large number of mergers, reducing the number of bus operating companies substantially (Mathisen and Solvoll, 2008). As there is a large overlap between the local and express coach markets – most express coach companies' main activity is to operate in the local bus segments – this reduction in the number of companies has also affected the express coach markets. All major express coach companies, Nettbuss, Boreal, Tide, Trønderbilene and Lavprisekspressen.no also operate in the tendered local bus market, or are subsidiaries of companies operating in these markets. Express coach policies are unlikely to have caused these structural changes of the bus industry, for two reasons. Firstly, express coach operations are mostly a side activity of local bus operators, and not their core business. Secondly, the relative size of the local bus market compared with the long-distance express coach market suggests that the former is dominant. In 2010, the total express coach market carried 5.3 million passengers and produced 34 million bus kilometres, compared with the total Norwegian

scheduled bus market (including express coach services) of 314 million passengers and 249 million bus kilometres (source: Statistics Norway). The total revenue of the express coach markets was between NOK 0.7bn and 0.8bn in 2010 (Aarhaug et al. 2011), compared with NOK 9.3bn for the total bus and coach market also in 2010 (Statistics Norway, 2015).

These developments in response to deregulation and tendering of local public transport are similar to what has been observed in Sweden (Alexandersson et al. 1998) and the UK (White and Robbins, 2012).

3.4 Few lines with direct competition – mainly intermodal competition

The Norwegian experience shows only a few cases where there has been more than one company /joint venture operating a particular O-D relation in on-road competition. In spring 2012, there were two relations: Bergen-Stavanger with two competing services (joint venture *Boreal* and *Tide*, and *Nettbuss* under the brand *Bus4You*); and Oslo-Kristiansand with three competing services (*Nettbuss* with the brand “*Sørlandsekspressen*”, *Risdal Touring* as “*Konkurrenten*”, and *Unibuss* as “*Lavprisekspressen.no*”). All other domestic O-D relations that are served by express coach are currently served by one company or one joint venture only and without competition from other express coach operators.

Intermodal competition is, however, ubiquitous. There are many instances where express coaches face endpoint-to-endpoint competition with rail, air, high-speed craft and ferry services. Express coaches also operate with some geographic overlap with local bus services, which operate with subsidies.

In interviews with industry representatives, the entry of the low-cost airline *Norwegian* in the early 2000s is emphasised as being particularly detrimental. From Figure 2, this is evident from the fact that the patronage growth of long distance express coach services stagnated. However, there need not be a direct causal relation between the stagnation in express coaches and the entry of the low-cost air carrier, but it occurs at roughly the same time and is cited by the industry as an important event. To investigate this we had a look into a selection of relations. Our finding is that there are some examples of express coach operators which have reduced their services in direct response to market entry of the low-cost airline (in particular services between Oslo and the major cities on the west coast). But there are more examples of express coach operators which continued their service levels in parallel with the low-cost airline entry, in particular on shorter relations, such as Bergen-Stavanger (about 200 km) and Oslo – Kristiansand (about 300 km). On the Bergen-Stavanger routes the modal split was 3 percent boat (high-speed craft), 13 percent coach, 39 percent air and 45 percent car, on end-to-end trips in 2010 (Denstadli and Gjerdåker, 2011). The market share of coaches would be much higher if in-between markets were included in the data. On these relations, the express coach companies are able to compete well with low-cost aviation. On the longer services, such as between Oslo and Bergen and Oslo and Trondheim (both more than 500 km), express coach companies still maintain a presence but with low frequency and passenger volumes compared with low cost air carriers. On these connections, air has a 51 and 52 percent market share, and coaches a market share of 1 and 3 percent in 2010, respectively (Denstadli and Gjerdåker, 2011). This gives support to the

claim that there is intermodal competition between air and coach travel, and that the coach services are less prominent on the long haul lines.

The main argument in the old regime with strict regulation was that express coaches would compete directly with subsidised rail (which was seen as a natural monopoly) and reduce rail ridership. This has not been the case. Figure 4 illustrates the rapid growth in the express coach industry. However, it also shows that the railways experienced steady growth after the express coach deregulation. Norwegian railways have not undergone any major structural changes during this period that would affect the developments presented in figure 4. Vertical separation of infrastructure from rail operations occurred in 1996. The Oslo Airport Express Train started its operations on the newly built railway line in 1999. One railway line, the *Gjøvikbanen*, was subjected to competitive tender with effect in 2006.

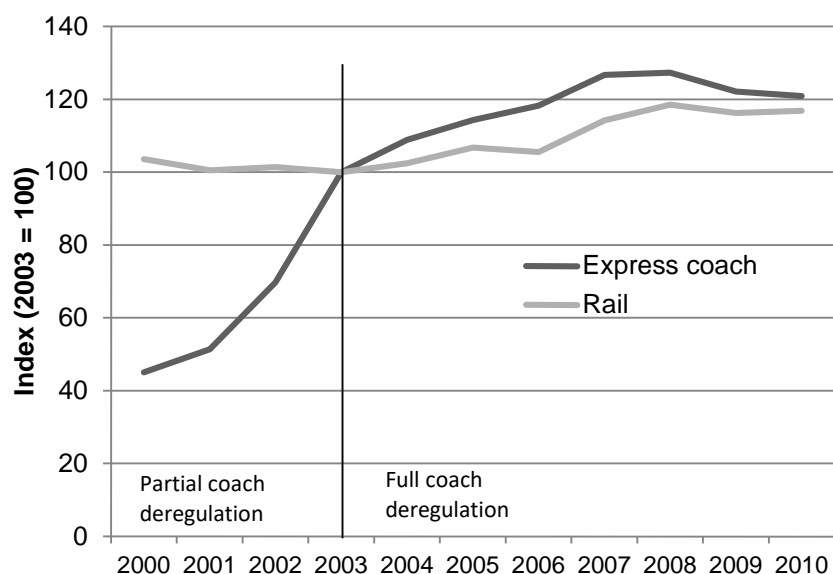


Fig 4 Indexed passenger development of express coaches and domestic rail.

Sources: Statistics Norway, Norwegian National Rail Administration, TØI). Index 2003=100.

3.5 Innovations introduced in the industry

A main difference between the Norwegian and Swedish express coach markets is the markets they target. In Sweden, there has been a development towards direct routes to and from Stockholm which is the *de facto* Swedish hub (Aarhaug et al., 2011b). This is partly due to the fact that there was no established central marketing structure like there was in Norway (with NBE) before deregulation. After deregulation, competition laws have prevented the establishment of such a structure in Sweden. However, the Norwegian system has been more “A to B” direct relation oriented within a network, with coaches mostly going between a rural area or smaller town and the regional capital and in some cases between mid-sized towns (Aarhaug et al. 2011a). This is a more decentralised network

than the system in Sweden. In this way, the structures in place before deregulation influenced the development paths after deregulation.

In 1998, a new concept was introduced, TIMEkspressen [the hourly express], which offered a rail-like schedule with high quality coaches targeted at a more frequent traveller and also the daily commuting markets. This concept, which was introduced by a company which is now a part of *Nettbuss*, and which was a result of the handing over of express coach regulation to the State from the regional counties and liberalising entry, has been very successful, as described above. Without this liberalisation, many TIMEkspressen lines would not be legal. In particular, TIMEkspressen has attracted customers between 50 and 150 km from city centres. Many of the communities where the TIMEkspressen operates also have a rail service; however, TIMEkspressen is able to compete with rail in particular by removing the need for interchanges between bus and rail. Further, they offer a fast, reliable and comfortable service with a decent service frequency.

In 2005, another new concept was introduced: the low-price concept with pre-booked tickets using yield management to provide low cost tickets to a limited number of early bookers, targeting price sensitive market segments. The service operates with a low frequency (two departures a day or less). This has so far only been moderately successful. Only Lavprisekspressen [“the low price express”] operates this concept, and as of 2015 they only operate two routes with this concept. In 2006, they were running four.

In 2012, Nettbuss introduced a new concept. It is similar to Lavprisekspressen with respect to yield management, but is targeted at the high end of the markets, between larger cities, focusing on comfort. In 2012, it was introduced on the

Bergen-Stavanger line. In 2015, it is in operation between Nøtterøy/Tønsberg (mid-sized city, with good rail connection) and Oslo and internationally between Oslo and Gothenburg and Oslo and Stockholm. This is a direct transfer from Nettbuss' activities in Sweden where they have operated this concept successfully for a number of years.

3.6 Regulatory challenges

Since the deregulation acts, there have been two main legal challenges for the express coach industry. One is how to interpret the Competition Act with regard to what is, and what is not, legal cooperation between companies. The other relates to tendering requirements following EU-regulation 1370/2007 and the role of regional counties in regulating intra-county bus operations.

The question of legal cooperation caused a long running (from 2007-2012) legal battle between Tide, Boreal and NBE on one side and the Norwegian Competition Authority on the other. The latter found the three companies' cooperation on the Oslo-Stavanger joint route ("Kystbussen") to violate competition legislation in that the cooperation restricted competition, either as intention or as consequence. After appeals, the case ended in a ruling by the Ministry of Government Administration, Reform and Church Affairs which supported the coach companies' right to cooperate on this particular line. The rationales behind this ruling were that the intermodal competition, in particular with car, was important; that a new express coach operator had recently entered the market; and that there were significant benefits from cooperation, in particular

in terms of more efficient use of the workforce and coach fleet, which offset the negative effects.

The second challenge is the EU-regulation or, rather, the way it has been adopted by Norwegian local counties. The express coach market is not affected by the regulation directly, as it is mostly operated on private initiative and commercial basis. However, as we have seen, the industry is greatly affected by developments in the way local public transport contracts are awarded. Additionally, local county governments restructure their public transport services in response to the EU-regulation. In particular, there has been a move toward purchasing public transport services for larger areas on tendered gross contracts. As a result, some counties partly see the express coaches as a competitor to their local and subsidised networks. As the county governments regulate local public transport, they can prevent commercial operators from serving local (within-county) traffic. In effect, the county governments can remove the commercial operator by restricting its operation. The developments in Troms County in northern Norway provide a good illustration. The county government created a new PSO bus service in parallel with the existing commercial express coach route. This service was put out for tender as part of a larger route package on a gross contract. The contract was awarded to a different company than the express coach operator, and the express coach was prevented from serving local passengers (i.e., traffic within the county). The intra-county part of this commercial service constitutes 210 out of the 250 km route. As a result, the commercial long-distance coach service went out of business and NBE no longer operates a full, country-wide express coach network. The political motivation for doing this, was to present the local county government as a service provider.

There have been similar cases in other local counties (Aarhaug and Fearnley, 2012).

4 Discussion and conclusions

From theory, it is expected that the use of a particular product or technology, when introduced to a market, will grow rapidly until it reaches a peak, or saturation, and then level off. The Norwegian express coach market has followed this pattern, twice. It occurred after the first round of limited deregulation around 1998, and again after the general deregulation in 2003. However, express coaches are not strictly a new technology. In fact, political regulation was the major factor preventing market entry. Still, the observed developments are very much in line with expectations.

When market entry regulation was lifted, first partially and then fully, the express coaches rapidly entered the market and were able to create and expand them – up to a certain level. The rate of growth slowed rapidly after a few years of expansion. Our data cannot inform whether this slowdown is an effect of stagnation due for example to competition with low-cost airlines, an effect of market consolidation, or a saturation effect.

The differences between Norway and Sweden in how their markets developed, show clear signs of path dependency. In Norway, there was already a marketing company (NBE) with a proven concept which could easily expand into new markets and build a national network. In Sweden, on the other hand, this framework was not present and as a result, the industry did not have an existing

framework to expand into. Instead, they invented a different service based on longer routes, competition rather than integration, and the capital Stockholm as a hub for most services. Swedish competition law now prohibits cooperation under a marketing umbrella like the Norwegian NBE.

Our research shows that deregulation has created a market, where there was no market before. This market has had positive effects, providing benefits to a relative large number of people, who are enabled to make trips they could not make before.

From figure 4, we saw that the express coach industry was able to expand at the same time as the traffic volumes on the railways grew. In other words, the growth in the express coach market has not directly been at the expense of rail markets. The two modes have experienced parallel growth.

Several express coach operators rely heavily on their local, subsidised traffic. At present, the various local interpretations of EU-regulation 1370/2007, which regulates subsidised PSO operations, are an important source of uncertainty for the future of the industry. This is most likely an unintended effect of the regulation, since commercial services are exempted. Still, since the county governments increasingly use competitive tendering and gross contracts for their subsidised transport, the express coach companies find it increasingly difficult to coexist with these services. Several local authorities support their subsidised services by preventing express coaches from picking up local passengers. So far, this has mostly affected marginal lines. In one case, it has caused the closing down of an express coach service. The overall effect on total express coach volumes remains limited.

The Norwegian experience offers several lessons that can be valid internationally:

1. The express coach industry is able to provide a service that is not provided by rail – even when the routes run in parallel. It serves smaller markets, and offers a more flexible network

An interesting observation is that there are lines that are able to operate profitably, without subsidies, where the alternative has been to offer no service what so ever, or to rely heavily upon subsidies.

2. The express coach industry is able to grow new markets rapidly as they open up

The rapid growth following the partial deregulation, and then again after the full deregulation, illustrates this. The industry was able to double the size of operations within two years of the market opening in 2003. A similar growth capacity was demonstrated with the partial deregulation around 1998.

3. The express coach industry is greatly influenced by the developments in the local bus industry

A very important explanatory factor describing developments in the express coach market, is the local bus market. Many express coach operators have local PSO services as their main activities, while express coach operations are more of a spin-off. Structural changes in local markets, like mergers and acquisitions, translate directly into the express coach markets.

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