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Smaller firms on a deregulated market- dynamics of network interdependence in the airline industry in Sweden

Abstract

This paper is about how smaller firms entered the and developed on the Swedish market of airline industry by making use of alliances and networks. Our findings show that of a changing market structure over time. In the early stages the smaller firms had a situation where the monopolist tried to continue its domination of the market by hindering interline agreements, by alliances or by acquisitions. Later on dominance declined and the smaller firms grew stronger but competition was intensified. A combination of entry and exit of firms and businesses was important for development. Small firms entered from nearby air business and most common alliance were operational. The small firms formed loosely connected networks while the larger had tighter networks. Regions seemed more important than countries.

Introduction

In 1992 the airline market in Sweden was deregulated. The political intention was to create a more competitive and effective market, especially for domestic regular passenger flights. During this period of transformation and restructuring a number of small firms entered the market and the dominating firm, SAS, was gradually changing its market behavior. As a result many new ways of competing and cooperating were developed both between the small firms

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and between large and small firms. The need to cooperate or possibilities to compete differed between the small firms and were to a large extent dependent on developed resources and competence.

Since the deregulation growth and survival of the small firms have been in many cases jeopardized and many have gone bankrupt or withdrawn. Various reasons for this are suggested, most of them related to the ability of SAS to meet competition due its scale and scope advantages, its frequent flier program, its acquisitions and alliances. Also the specific nature of the “hub and spoke” system, the scarcity of slots at major airports and the importance of international connections have posed formidable barriers and challenges for growth and survival of the small entrants. Other equally important reasons for the staying and developing on the market are that small firms find niches in the market, develop new network relations, find new ways to cut costs and are flexible in response to changing conditions. The processes of change on the market are interacting and of different importance over time like the different reasons. Therefore it seems of importance to study not only how the smaller firms entered the deregulated airline market but also how they were able to stay and develop on that market over a longer period.

Purpose of the paper

The purpose of the paper is to describe and analyze how small firms entered the deregulated Swedish market and developed regular passenger traffic during the period 1992-2003. We will then specifically focus on the role of inter-firm cooperation and network dynamics.

The theoretical framework

The theoretical network is mainly drawn from the markets-as-network approach and literature on alliances.

In the markets-as-networks approach the market is viewed as networks of multidimensional, dynamic exchange relationships between economic actors who control interdependent resources and carry out inter-linked activities (e.g. Ford, 1998, Mattsson, 1998). The network structure influences the possibility to enter and to develop on the market and the development over time of larger and smaller firms lead to changes in the structure. The time of the entrance will therefore play a role for the possibilities for the smaller firms to stay and develop on the market.

In markets-as-networks alliances are formed and switched and competition and cooperation shifts within these networks.

Three main motivations broadly applicable for forming or establishing alliances have been formulated by Gulati (1998) as a) the transaction costs of small numbers bargaining, b) enhancing the competitive position or market power and gaining organisational c) knowledge or learning from each other. These are relevant for the smaller as well as the larger firm. The reason for establishing an alliance is, however, not the focus in the network approach but rather how the alliance is formed and how it develops over time. This has to do with the essence of the network view, that relationships are normally long term. There is a combination of stability and change in the existing relationships. Both are necessary for a relationship development. (Johanson & Mattsson, 1992)

The firm's position in a network is important for its possibilities to develop. Enhancing its network position can be a way to grow as well as a base of strategy for firms in smaller networks/nets and the market on the whole. The position is defined in terms of how it is related to other firms of the network or as consisting of its portfolio of relationships and the activity links, resource ties and actor bonds that arise from them. (Johanson & Mattsson, 1992; Ford, et al, 1998)

In the choice of partner the firm's embeddedness in the network might hinder as well as facilitate the formation of certain relationships. The organisations are therefore seldom free to choose their partner. Most companies are already tied up in existing relationships and nets and these will consequently have to be broken or changed in order to establish a new one. However, concurrent processes of customers, competitors and related to alliance internal development makes the choice of partners difficult and subject to change over time (Hertz & Mattson, 2004) It would be interesting to know to what extent this are true to a newly deregulated market.

In the network approach dependence is expected to be mutual and discussed in terms of asymmetry or symmetry of an alliance. A very high asymmetry would imply certain problems in the relationship. While the firm having little power or a less important position would have larger difficulties in realizing the benefits, the relationship would also be more difficult to manage. (Easton, 1992) However, forming networks of cooperation between smaller firms that together compete with larger firms "collective competition" (Gomes-Casseres, 1996) can be an important way of meeting the threats on the market.

In most cases a joint venture is not recommended when there is potential conflicts of interest between partners. (Gomes-Casseres, 1996) This seems to be important for the cases where competitors are forming alliances. Furthermore studies show between competing firms have a high rate of failure. (Bleeke & Ernst, 1995)

In Hertz (1996) these situations are described in terms of complementarity and overlap within in the smaller networks for services/products and geographical area. Partners are often chosen to cover a complementary geographical area but with the same product/service or to have

different services in the same geographical area. These two combinations of overlap and complementarity are also the most common which normally include both adaptation between the firms and risk of conflicts in the development. In areas of overlap the conflicts of interest between the partners might create problems for the alliance ending up in its breaking if not solved. Further the fully overlapping situation means large areas of conflicts, which would be in line with Bleeke and Ernst (1995) findings about the failure rate between competitors.

A typical example could be in the formation of an alliance between two large international airlines. The partners's existing nets can be either complementary or overlapping in services and/or coverage.

Wang & Evans (2002) have made studies of the large passenger airline alliances and have calssified the different forms of alliances. These are route specific services, code sharing agreements, joint operations, marketing and finally the "open sky" alliances. The bilateral route specific services are seen as the simplest form while the "open sky" is the most extensive. Code sharing is defined as "one partner assigns its airline designator a code to the flight and its partner"(Wang& Evans, 2002 p 79). Code sharing often includes one airline buying block of seats from another airline and reselling them. Joint activities involves not only code shares but also baggage checks, honoring tickets between them but keeping their identity. The the next stage marketing alliances include global groupings. This is where Star alliance, Oneworld, etc fits in. The "open sky" would be a much broader commercial allainces that include most of the other types of agreements but also joint purchasing maintenance, etc.

However, the question is of course to what extent the SMEs will make use of these type of alliances and when, since the firms we are studying have small resources, work regionally and are not only passenger airlines.

The empirical study

Empirical data has been gathered both from all the airlines operating on the Swedish market between 1992 and 2003. Interviews have also been made with experts of the airline market and persons from the Air Traffic Department of Sweden. In total there are 24 firms described using secondary sources that existed during the period 1992-1998. Out of which some went bankrupt and others were acquired.

Deeper interviews were made with 11 firms, which are firms that still exist today but. Another four firms were interviewed three years ago. The described firms will complement the interviews where information is available.

With our purpose in mind we have divided the empirical material into entry to the market of passenger traffic, growth and development and alliances.

Entry to the market

The firms that entered the market directly after deregulation had a history in the air business and were coming from nearby niches such as taxi flights, charter for businessmen and also airfreight.

Two examples are Malmoe Aviation and Skyways. Malmoe Aviation was a firm starting early. They had school and taxi flights from 1981 and some airfreight. However, after a year they went bankrupt and was taken over by 1993 by two private owners. In 1994 Malmoe

Aviation stopped with airfreight and focused on passenger flights. It was later sold on to the Norwegian firm Braathens.

One of the very early starters, Skyways, were acquired by two owners of smaller firms in the business. One of them had a history of flying for the Swedish Defense. These firms together formed the base of Skyways and was established in Stockholm. To get the right knowhow they employed people from SAS and Linjeflyg, the two dominating firms on the market.

At the same time the national airline, SAS, acquired 100% of the domestic dominating actor Linjeflyg directly after the deregulation. In the early stages SAS was trying very hard to protect its market share against the new competitors. One way of doing this was to prohibit new firms to get interline agreement. However, after a law process this was forbidden for SAS but at that stage the small firm was already bankrupt. Other ways to hinder competition for SAS was to acquire the smaller firms or creating strategic alliances with them.

After the deregulation there were several firms with intention and permits to start that did not move into regular passenger business. Some of them entered during a shorter period but left. Some airfreight firms i.e. Värmlands Flyg, Nordflyg, Tryggflyg and West Air were examples of either having very short turn into passenger traffic, had the intention to enter but never did so or just stayed on in the airfreight business.

The smaller airlines entering the market were mostly regional and these regions often involved close by areas in Norway, Finland or Denmark depending on where the firms were situated.

The smaller firms that had started as taxi flights firms were more aware of what firms and type of business that were present in the region, while the bigger ones starting in larger regions like Stockholm and Malmö did not express such concerns.

Some firms starting during mid 1990s acquired other firms that went bankrupt or bought aeroplanes from firms that had economic problems. An example was City Airline that actually acquired what was left of JET 2000 including both planes, hangar, terminal, licences and permits and in another case Swedair starting as a result of the bankruptcy of Holmstrom air.

Growth and development

There were many different ways growing and coping with growth over the period.

Growth by acquisitions was one way but and most common by the larger firms. SAS was buying the mediumsized firm Norwegian firm Braathens and 25% in Skyways but also other firms AirBotnia in order to meet competition with Finnair. Skyways have been buying several of the smaller firms like Highland Air, Airborne, Flying Enterprise and Air Express.

The other way of growing was by taking over routes from SAS where SAS could not make them profitable. Skyways had operated 32 routes in Sweden and had a market share of 10-15 % at the end of 2003. Since SAS was part owner they were more likely to hand over to Skyways. On the other hand other firms have been taking over where Skyways, Transswede, AirBotnia, etc did not succeed. The smaller firms expressed tht they analysed what the others did wrong and started it in a different way.

One way of coping with growth was to concentrate on one type of business. Malmoe Aviation growing in passenger stopped 1994 having freight business. Falcon Air growing in airfreight stopped having passenger transport 2003. Only the very small firms could handle a combination of many different businesses like taxi flight, charter, freight like taking mail to different regions.

Facilitating for the smaller firms were the fact that SAS got economic problems. This way pilots and crew members became available on the market. The fact that SAS was prohibited to apply their bonus programme was domestically from 2002 also gave other firms the possibility to compete on more equal terms.

Outsourcing was a way to make it possible to grow. Some of the firms like Golden Air really decided to outsource much of operations over time. Skyways, which has become a larger firm, decided to produce most of their business by themselves. The same was true for European Executive Express also which offered exclusive Business Jet services and wanted to have the full control. Skyways combined it with starting a school for smaller firms.

Combining domestic and international traffic was another common way. Regions might cover a part of Nordic countries but also other countries like Latvia, Estonia, England, Ireland Germany, Holland, etc

Using regional airports was another way of getting lower costs thereby offering lower prices with the intention of increase the market share.. Some of these are Ryan Air, Sterling airways and Nordic Air Shuttle.

Offering low price flights was especially at later stage one important way to growth at least after the entrance of Ryan Air. Many other firms have done that now like SAS, Malmoe Aviation and Nordic AirlinK.

Many of the firms have actually used alliances as an important way to decrease costs and to meet competition.

Importance of alliances over time

The majority of the alliances were formed with other airlines as partners or suppliers. Few airlines actually have alliances with customers. However, Malmoe Aviation mentioned that they both an alliance with Elite hotels and Flyg taxi. The airlines with the majority of their business in taxi or charters flights seemed to have customer alliances more frequently since due to their dependence on the larger firms in the region .

Alliances with customers are, however, common in airfreight. Many of the smaller airfreight firms worked with alliances with larger airfreight firms like TNT, UPS, DHL.

Cooperation between several firms in a network existed in taxi flights and airfreight business. These firms were normally very small, regional and have limited capacity. When they were fully booked or did not have the right size of plane they contacted or recommended a group of other small firms offering similar services in a close by region.

As for the airlines working mainly with regular flights they have alliances for specific destination, or a region or nationwide depending on the market they want to cover. Many of the firms have also partners from other countries like, Nordic AirlinK and Finnair, Golden Air and Finnair and Malmoe Aviation and KLM, etc.

Depending on the type of alliances the commitment are very different. In the case of SAS and Skyways it is a question of a strategic alliance. In this case the strategic alliances is combined with SAS owning 25 % of Skyways. In another case of Finnair had an alliance but then acquired 85 % of Nordic AirlinK.

Both SAS as Finnair has formed alliances with a group of smaller firms feeding in to their hubs. In Sweden Skyways is the most important alliance but companies like Wiberö in Norway, Maersk in Denmark and Air Botnia in Finland have similar alliances to SAS.

Skyways, Nordic Airlink and AirBotnia not only fly domestically but also between the different countries in special regions.

By feeding into the SAS hubs these firms also feed in to the system of the STAR alliances..

The STAR alliance has a different character of cooperations not only operational or codeshare programmes but also combined marketing programmes involving much larger commitment.

This way the local, regional and crosscountry networks are tied together.

Discussion

Network structure

The network structure changed over time. In the beginning the situation was more difficult since SAS was still very strong and more eager to defend its position. After a period when more firms started and some went bankrupt this facilitated for new firms to enter. The new firms learnt from the failures of others, taking over existing routes and markets as well as buying the old equipment, terminals and airplanes. Thereby the access to the market were quicker. The decline of SAS and layoff of personnel facilitated for the new firms starting later to find necessary resources. In the end of the period it seem to get tougher on the market since new large international firms have entered and started low price strategy. Therefore possibility to enter the market was different over time since the market structure changed (Johanson & Mattsson, 1992)

Establishment of smaller networks- cooperation and competition

Within Sweden networks were formed between some of the regional smaller firms due to lack of capacity and a need to solve the problems of the customer. The firms had offered the same service but cooperated when needed for customers. This was common for taxiflights, charter

and airfreight business. However, this type of cooperation was not to the same extent in regular passenger business.

In regular passenger business the networks formed during this period was SAS buying or forming close alliances with larger domestic airlines in the different regions of Sweden, Norway and Denmark. Similar networks seemed to be formed by Finnair in competition to SAS. In these cases a "collective competition" as presented by Gomes-Cassers (1996) was present. These cooperations involved both operational and marketing agreements.

Entering and exits and development

We see the fact that entering and exits are tied together (Hertz & Mattsson, 2004)

The firms going bankrupt actually facilitated for new firms to enter. Here entry and exit in are directly tied together.

Some of those entering in an early stage are among the biggest ones today. However, this has not been a straight way for most of them. One of them been sold twice but not been merged which made it possible come back to the market. As to the other one is became a joint partner with SAS.

Other types of entries and exits tied together are growth and acquisitions .The larger firms acquired some of the regional firms with the intention to gain a better coverage, economies of scope and get rid of competition. (Gulati,1998)

Entry and exits to specific regional markets were common by starting a new direct flights and then if they did not become successful, leave it. These routes could be domestic or international. When it turned out not to be profitable many of the smaller firms left and started another one somewhere else.

Alliances and growth

Development by creating alliances seemed necessary due to lack of resources. The smaller firms used a large variety of alliances. The main type of alliances were the operational alliances. Operational alliances made it possible to get economies of scale and to get knowhow like access to technicians, setting up of booking system, etc. However, the alliances were shifting over time. As the firms grew larger some of them decided to handle more of their own operations in order to have a better control of the quality. Codesharing was less common since many of the firms were too small for the exchange.

Market alliances existed in different forms. The networks of small firms in taxi flight services, airfreight, etc helped each other in marketing by contacting the other firms or recommending them to customers. However, the more extensive marketing alliances were present between some of larger firms like Skyways and SAS.

In general most of the airline alliances could be classified as a combination of complementary and overlapping (Hertz, 1996), since they were with other airlines but covering different regions or being complementary helping each other in the same region. This way the smaller firms could gain economies of scale and/or scope.

New airports and new niches

Another way of surviving on the market is by low cost. Utilising different and less attractive airports, offering different conditions the crews, etc. In the end of the period the international low cost airlines like Ryan Air entered and changed the attitude of the customers.

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Regions , countries and internationalisation

The networks that we have seen are not so much tied to countries but rather regions they cover a specific region which in the northern part of Sweden might be Norway and Finland

and Sweden. The small firms start and leave traffics rather quickly between or within countries depending on the situation. The firms seem to be very flexible in starting new direct flights. These flight might sometimes compete or cooperate with the large monopolist firm or some of the other large international airlines. Therefore internationalisation is something very changable and flexible during this period. Sometime the start of a small firm was by an agreement with another larger airline firm to service domestically in another Nordic country.

Conclusions

Our preliminary findings show that the effects of the deregulation in 1992 are at first now- more than 10 years later- shown on the market; through changes of market rules, more intense competition, new interfirm-cooperation and entry of low-cost airlines. Major companies have lost market shares to smaller and some smaller firms grown by acquisition to medium-sized. Some firms have deliverately chosen alliance strategy while others decided handle more themselves.

Operational alliances seem to have been very important in the beginning in order to reduce the risks. Later on the codesharing and other types of alliances became more common.

Cooperation between small firms were more frequent and intensive in the early stages than in the middle period but lately the development turned into a new phase of increased both cooperation and competition.

The small firms faced different competition depending on in which market segment they entered but also earlier experience played a role. Starting with a variety of air service many later withdraw in order to specialise and focus.

Networks were formed on different level regional tying in international partly overlapping with larger alliances of STAR alliances and others.

A” collective competition” were established during the period between the Finnair and SAS networks of smaller firms feeding in to their hubs.

SAS has dominating role, but during the second half of the period the position is weakening on the market. SAS was ordered to discontinue to award frequent flier points on domestic flights from 2002. After this some new entrants and low cost operators appeared.

The low cost airlines have attracted new kinds of customers and created new market segments and thus expanded the total potential market. The international low-cost company Ryan Air has strongly influenced the established companies on the Swedish airline market, both the major ones and the smaller ones.

References

Bleeke, J. & D. Ernst (1995) Is Your Strategic Alliance Really a Sale? HBR January-February pp. 97-105

Ford, D, L.-E. Gadde, H. Håkansson, A. Lundgren, I. Snehota, P. Turnbull, D. Wilson (1998). *Managing Business Relationships*. London, U.K., Wiley & Sons

Gomes-Casseres, B.(1996). *The Alliance Revolution - The New Shape of Business Rivalry*. Cambridge. Harvard University Press

Gulati, R. (1998) "Alliances and Networks" In *Strategic Management Journal* Vol 19, pp 293-317

Hertz, S. (1996) "The Dynamics of International Strategic Alliances- A study of freight transport companies." In *International Studies of Management and Organisation*. Summer 1996 Vol 6 No 2, pp. 104-130

Hertz, S. & L.-G. Mattsson. (2004) " Collective Competition and dynamics of Market reconfiguration" In *Journal of Scandinavian Management* (forthcoming)

Johanson, J & L.-G. Mattsson, (1992). "Network Positions and Strategic Action - An Analytical Framework". Eds Axelsson B. & Easton G. In *Industrial Networks – A New View of Reality* . London, Routledge

Mattsson, L.G. (1998) Dynamics of overlapping networks and strategic actions by the international firm. In: Chandler, A.D. Jr, P. Hagström and Ö. Sölvell (eds) *The dynamic firm*. Oxford:Oxford University Press

Wang,Z.H. and M. Evans (2002). "Strategic Classification and Examination of the Development of the Current Airline Alliance Activities." In *Journal of Air Transportation* Vol 7, No 3

Wang,Z.H. and M. Evans (2002). "The impact of Market Liberalisation on the Formation of Airline Alliances" In *Journal of Air Transportation* Vol 7, No 2