Short Final

The Decline and Fall of Braathens SAFE

Alasdair McLellan



Master thesis in history

Department of Archaeology, History, Cultural Studies and Religion

Faculty of Humanities

University of Bergen

15 May 2017

© Alasdair McLellan

2017

Short Final: The Decline and Fall of Braathens SAFE

Alasdair McLellan

https://bora.uib.no/

Sammendrag

Det norske flyselskapet Braathens SAFE var å regne som en nasjonal institusjon. De var et produkt av regulert luftfart hvor myndighetene tildelte konsesjoner og hvor flyselskapene endte opp som monopolister på hver sine ruter. Norge fikk dermed to flyselskap på stamrutenettet som levde i symbiose i stedet for å konkurrere. Som en del av tilnærmingen mot EF, fulgte Norge etter USA og deregulerte innenriks luftfart i 1994.

Braathens oppnådde gode resultater frem til 1998, da Oslo lufthavn, Gardermoen åpnet. Deretter økte de antall avganger uten en tilsvarende økning i antall reisende. Samtidig måtte de konkurrere mot lavprisselskapet Color Air og en like aggressiv SAS. Det hjalp heller ikke at Braathens kjøpte de svenske innenriksselskapene Transwede og Malmö Aviaiton. Braathens gav opp i mai 2001 og ble solgt til SAS etter Konkurransetilsynet godkjente dem som en falittbedrift.

Hensikten med denne oppgaven er å se på de underliggende årsakene til Braathens nedgang. Den tar spesielt for seg utviklingen av rutestruktur og nye markedsføringsstrategier som flyselskapet innførte mellom 1994 og 2001. Samtidig ser den på en del muligheter som ikke ble fulgt, slik som dannelsen av en Scandinavisk "mini-SAS" og muligheten for Braathens å ha blitt et lavprisselskap.

Hovedfunnet er at den direkte årsaken til Braathens nedgang var at de opererte med for høy frekvens, slik at de fikk for lav kabinfaktor og dermed lav omsetning per avgang. Dette skyldes at selskapet ønsket å holde tritt med SAS i kampen om de lukrative forretningsreisende. Ingen europeiske nummer-to-selskaper har klar å gjennomføre en slik strategi, og har enten bukket under eller blitt kjøpt opp.

Oppgaven finner at det er flere underliggende årsaker til Braathens fall. De fleste handler fundamentalt om at SAS var i stand til å bruke sin størrelse og markedsposisjon til å tilby et bedre produkt til forretningsreisende. Braathens inngikk en allianse med KLM, men SAS inngikk i den mer omfattende Star Alliance. SAS' bonusprogram EuroBonus var en sentral mekanisme for å tiltrekke kunder, da de kunne tilby en mer omfattende rutenett enn Braathens og sin bonusprogram BRACard, senere Wings. Mer generelt slet Braathens med at de hadde et svakt internasjonalt nettverk ut fra Oslo og at de i praksis var et nesten rent innenriksselskap. De klarte heller ikke å oppnå gode nettverkseffekter mellom rutene i Norge og Sverige.

Braathens ble i for stor grad en reaksjonær selskap som prøvde å holde tritt med SAS. Tiltak som Best og Back bidro først og fremst til å gjøre de to selskapene mer like. Mulighetene for Braathens lå først og fremst i å differensiere seg, men dette maktet de ikke å gjøre. Etter Braathens falt, skapte det rom for Norwegian, som lyktes mot SAS nettopp fordi den var anderledes.

Preface

Landing an aircraft is fine-tuned process carried out in symbiosis by pilots and air traffic control. The last stage before touch-down is called *short final*. This thesis covers the metaphorical final flight of Braathens SAFE. At the time the company's demise came as a surprise to many. After half a decade of deregulation all looked good, but the final three years were a short and rapid descent.

First I would like to thank my supervisor, Harm G. Schröter, for his insights, suggestions and not least his confidence in me. No matter how I felt before our consultations, I returned reinvigorated and motivated for the next step.

An appreciations also goes the faculty members and my fellow students in the seminar group. They provided valuable aid and numerous feedbacks which helped shape my thesis for the better. A special thank goes to my friends and family for their motivation and support when going got tough.

Table of contents

Sammendrag	3
Preface	
1 Introduction	
1.1 Premise.	1
1.2 Academic review	3
1.3 Thesis question	
1.4 Methodology	
1.4.1 Particular caveats	
1.4.2 Sources	
1.5 Structure of the thesis.	
1.6 Fundamentals of the airline industry	
2 From regulation to deregulation	
2.1 Introduction.	
2.2 The advent of regulated aviation	
2.2.1 International and Norwegian development of airline regulation	
2.2.2 Development of a Scandinavian airline cooperation	
2.3 Braathens SAFE's early history	
2.4 Second airlines	
2.5 Airline deregulation as a global phenomena	
2.5.1 Deregulation defined	
2.5.2 Early experience in the US	
2.5.3 The process in Europe	
2.5.4 Consolidation and privatization	
2.6 Airline deregulation in Norway	
2.6.1 Braathens SAFE's early experience with charter and competition	
2.6.2 First steps towards deregulation	
2.6.3 Parallel concessions	
2.6.4 Braathens SAFE entering international routes	
2.7 Conclusion.	
3 Institutional and competitive framework	
3.1 Introduction	
3.2 Traffic and airport structure	
3.2.1 Particularities of airline demand in Norway	
3.2.2 Air traffic growth	
3.2.3 Airport policy	
3.2.4 Fornebu and Gardermoen	
3.3 Competitors	
3.3.1 Developments in SAS	
3.3.2 Color Air	
3.3.3 Trains and bus coaches	
3.4 Consolidation of airlines in Scandinavia	
3.4.1 Regional carriers	
3.4.2 Linjeflyg	
3.4.3 Transwede and Malmö Aviation	
3.4.4 Mini-SAS	
3.4.5 Proposed merger between Braathens SAFE and SAS	
3.4.6 Deregulation in Denmark	
3.4.7 Consequences of the consolidation	50
3.5 Passenger- and seat taxes	
3.6 New marketing strategies	52

	3.6.1 Frequent-flyer programs	
	3.6.2 From cartel to alliances	52
	3.7 Changes in business practice	54
	3.7.1 Fall of the conglomerate	54
	3.7.2 Outsourcing	
	3.8 Conclusion.	
4	Routes and marketing	
	4.1 Introduction.	
	4.2 Corporate affairs	
	4.2.1 Changes to managerial approach	
	4.2.2 Public listing	
	4.3 Early domestic competition in Norway	
	4.4 Alliances and frequent-flyer program	
	4.4.1 BRACard and British Airways	
	4.4.2 KLM and Wings	
	4.4.3 Comparison with SAS and the Star Alliance	
	4.5 Domestic services in Sweden.	
	4.5.1 Purchase of Transwede	
	4.5.2 Purchase of Malmö Aviation.	
	4.5.3 Termination of Arlanda operations	
	4.6 Best and Back.	
	4.6.1 SAFE – the Norwegian flag carrier	
	4.6.2 A new service paradigm	
	4.6.3 Customer reactions.	
	4.6.4 Operational consequences	
	4.6.5 Return of the flag	
	4.7 Gardermoen and the price war	
	4.7.1 More flights and lower prices	
	4.7.2 Consequences of more flights	
	4.7.3 Large customers	
	4.7.4 Financial consequences for the airlines.	
	4.7.5 Improve 800.	
	4.8 Take-over.	
	4.9 Conclusion	
5 (Causes of the decline	
	5.1 Introduction	
	5.2 Fleet management.	
	5.2.1 Fleet age	
	5.2.2 Size of aircraft	
	5.3 Failing to capture the customers	
	5.3.1 The peril of frequency	
	5.3.2 Customer loyalty and international networks	
	5.3.3 A lack of differentiation	
	5.3.5 A lack of differentiation	
	5.4.1 Low-cost carriers as a heuristic.	
	5.4.1 Low-cost carriers as a neuristic	
	5.4.2 Prerequisites for Braditiens to transform to low-cost operations	
	5.6 International influences	
	5.7 Epilogue	
	5.7.1 Corrective measures—too late	
	5.7.1 Corrective measures—too fate	
	5.7.2 Braditiens Tegacy	
	J.O CONCIUSION	52

6 Conclusion	93
References	96
Literature	96
Sources	99
Archives	
Videos	99
Periodicals	99
Newspaper and magazine articles	99
Reports	
Online	
Appendices	108
Appendix A: Low-cost criteria	
Appendix B: Passenger and financial statistics	

1 Introduction

1.1 Premise

Disbelief, shock and sorrow struck the employees and customers of Braathens on 21 May 2001. The news had just broken that the majority owners of Norway's second-largest airline had sold it at a bargain price to Scandinavian Airlines System (SAS), its main rival through fifty-five years. Since its inception in 1946, Braathens SAFE was through the decades known for its reliability, service, lean operations and customer satisfaction. Many held it to be a national institution.

The downfall started with the deregulation of airlines. When the flying public woke up on the morning of 1 April 1994, aviation in Norway had changed forever. Gone were the protectionist policies which could trace their heritage to the end of the First World War. Gone were the days politicians and bureaucrats decided which airlines could fly when and at what price tickets could sell. As yet another sector, airlines welcomed the freedom to compete.

Braathens SAFE was a product of the age of regulation. Its operational models were rooted in a symbiosis—rather than competition—with SAS. The first three years with deregulation went without much turbulence. The restrictions at Oslo Airport, Fornebu capped the number of possible flights, disciplining the airlines. After Braathens completed a fleet renewal, it started moved its focus internationally. It partnered with KLM and bought two Swedish airlines, Transwede and Malmö Aviation. These did nothing but did drain the company for money.

Oslo Airport, Gardermoen opened in 1998. Braathens rebranded itself and introduced the two-tier seating classes Best and Back, eroding away their egalitarian image. A price and frequency war broke out with SAS and Color Air, the latter only lasting a year. From then Braathen started bleeding money, unable to generate enough revenue to cover their galloping costs. It took three years before the coffers were empty.

Deregulation of airline started in the United States in 1978 and spread to Europe in the 1990s. As in the US, both prices and airlines fell. For the industry it was disruptive force, with Braathens only one of many airlines to feel its wraith. Survival was dependent on adaptability or size. Braathens failed at both.

Large corporate failures in Norway are uncommon. Braathens' fall is an echo from a decade before, when financial deregulation led to a banking crises and the nationalization of Norway's largest

banks.^{1 2} It also shares some commonalities with the rapid decline of Norsk Data, the mini-computer giant who shattered when they failed to embrace personal computers.^{3 4} More striking is that the latter half of the 1990s and early 2000s was a period which saw an unparalleled number of established airlines collapse. Most prominent were leviathans such as Pan Am in 1992, and Swissair, Sabena and Ansett in 2001. The list of second-largest airlines to be bought by their larger counterpart seems endless, with some of the more prominent being Linjeflyg, Air Inter, Canadian, Trans World Airlines and Australian.

Airlines have always been perilous investments. Without privileges or subsidies, few succeed, and those that do often see limited profitability. Every interstate airline in the US predating 1978 has since either been bought up or entered receivership. The perspective of airlines shifted after deregulation, from that of reliability and stability to risk and volatility.

There are many reasons to investigate the fate of Braathens SAFE. The mere size of the airline as a corporation should in itself warrant an closer look. Its collapse remains one of the largest corporate failures in Norwegian history, and the causes of its demise still raise interest in the general press. Large corporate failures have wide-spread ramifications. They create substantial losses in terms of jobs, tax income and shareholder value. Yet, they can allow new companies to arise, with superior services and business models. Innovation is disruptive of nature, and can be unforgiving to those unable to adapt. Understanding the underlying causes of a failure, especially of large institutions, is of vital importance for society.

Deregulation increasingly replaced government intervention in the 1970s, gaining momentum through the 1980s and 1990s. Aviation is one of the industries where the the ramifications have been most disruptive for incumbents. The decisions to deregulate were taken in the political sphere, but the repercussions played out in the realm of business. This makes the topic highly interdisciplinary—while its temporal aspect makes it well-suited for historic study. It is important to approach deregulation from many angles. Braathens can therefore be viewed as one of very many institutions saturated by this force.

¹ The Norwegian banking crisis arose in 1987. The Conservative Willoch government abolished the additional reserve requirement in 1984, a step which reduced regulation on banks. A combination of strong economic growth, enthusiasm about the future and banks willing to lend with less security led to a rapid growth in credit and loans. The 1987 stock market crash bust the housing bubble, eroding away the banks' reserve capital. Many of the larger banks only survived after having their share capital written off and nationalized.

² Hanisch et. al. (1999): 341

³ Norsk Data was at its peak in 1987 the second-largest listed Norwegian company by market capitalization. Having focused entirely on centralized minicomputers, it failed to anticipate the thrust of the personal computer and was insolvent six years later.

⁴ Steine (1992): 5, 140; *Aftenposten* (12 May 1993)

⁵ Mikalsen (31 March 2015)

There are many possible routes for historical investigation of deregulation. For instance, the main view could be on the social and cultural impact of reduced air fares and new destinations, and the impact on increased travel, migration and globalization. Establishing an airline as the main protagonist is a trade-off, by which the consequences on the traveling public, the business sector and policy are largely ignored.

A historical study of Braathens' fall is therefore not just valuable in regard of the company itself, but it can provide a beneficial exemplification of the outcome of deregulation. It is an narrative often penned by economists, but also deserves to be investigated by historians.

1.2 Academic review

The historical literature spans from broader works looking at deregulation in the aviation sector at large, down to more detailed works dealing with particular airlines. It is dominated by a multidisciplinary approach, with only a minority being written by historians. Economists are the most dominant, commonly focusing on the business aspects of aviation and often using performance metrics as variables for analysis. In general, these tend to analyze the market as a whole, using economic theory to model the interaction between entities. A second major discipline are political scientists, who contribute by analyzing the political framework wherein deregulation took place. Corporate histories are a third major corpus, which tend to be written by journalists and former employees, and focus on a particular airline, often during a limited period. These are often well-documented and give a detailed insight in the airline's chronology, but commonly fail to write the history into a wider context.

The multi-disciplinary approach allows for a myriad of viewpoints and approaches, and sees the use of theoretical models from both economics and political science. Economic and political science research tends to dwell on the contemporary. Although sometimes emphasizing a historical approach, many instead also have a strong focus on using their evidence to predict or recommend future outcomes and policies. The fragmentation of research had led to a limited discourse between the research.

The two first monographes about Braathens SAFE were written by Ludvig G. Braathen, the airline's founder and first CEO. Published in 1957 and 1975, they straddle the path between autobiography and corporate history, dealing with the airline's early years. Braathen emphasizes his hard work and many obstacles he overcame in order to establish the airline. There are repeated comments on restrictions imposed by the authorities.

The airline's first two decades are also explored by Fuglem (1972), who digs into the political process surrounding concessions. In particular, he explores the friction between political and bureaucratic recommendations, and between the Labor and the center-right block. He concludes that although neither block opposed SAS or Braathens, the center-right block tended to prefer a stronger Braathens SAFE while Labor preferred a stronger SAS.

Tjomsland and Wilsberg (1995) is an official history book of Braathens SAFE, written by two of its executive officers for the company's semicentennial celebrations. It provides a detailed chronology of events from the airline's foundation until 1995, including the early stages of deregulation. Written before the financial troubles start taking their toll, the book presents an image of an airline at its height, granting a snapshot of the corporate culture at the time of writing. Although meticulous for its level of detail, it remains a self-published corporate history glazed in self-promotion. It builds it narrative around what it describes as the remarkableness of Braathens survival through the years with regulation, viewing this as discrimination rather than protectionism.

Wilsberg (2015) devotes the bulk of his book to the processes leading up to and following through the deregulation and subsequent corporate crisis, taking up the lead where the 1995 book left off. He has diligently detailed the affairs of the airline during the period, capitalizing on his personal involvement in the processes. The book takes a much more critical view than his previous book. It is perhaps most befitting to categorize the book as an apology. He takes up several of the underlying problems the airline was faced with and provides analysis regarding the causes of the failure. He goes far in stating that the company's demise was inevitable and largely attributes the causes of failure to external factors. One important aspect which is left out is the price war with Color Air and the issue of a seat tax. The book tends to emphasize the voice of the executive management and their strategies at the expense of investigating the company from the mindset of other key stakeholders, such as competitors, employees, customers and policymakers.

Lian (1996) is a commissioned economic report looking at the first two years of deregulation, giving a snapshot of the situation before price competition set in. It particular it studies the first moves taken by SAS after deregulation, relying heavily on economic metrics for its analytical framework. It concludes with the lack of competition, with the author stating that experience shows that duopoly market will normally not develop price wars.

Iversen (2002) looks at the processes leading up to aviation deregulation in Norway, primarily examining the shift in economic policy from the 1970s through the 1990s. He also explores the

⁶ As described more detail in chapter 2, concessions are government permissions to operate a given air route.

consequences for various actors, including airlines. Central to his analysis is the application of Michael Porter's Five Competitive Forces. He argues that Braathens during the 1990s operated with an "inconsistency in strategy" and was neither large enough or small enough to operate efficiently.

Salvanes, Steen and Sørgard (2003) use econometric analysis to investigate the situation. They conclude, using economic models, that the market showed semi-collusion, where the airlines colluded on price but competed on capacity. They argue this was not aligned with a competitive regime, where the airlines would have competed in box axis.

Strandenes (2004) investigates the consequences of the deregulation on the airlines, including the parallel concessions which took effect in 1987. As an economist, she applies economic theory to the issue, such as explaining the lack of a fall in prices prior to 1998 due to tacit collusion. She emphasizes that Braathens and SAS chose to enforce capacity competition instead of price competition. The highest revenues were gathered from business travelers, who placed more emphasis on flexible travel times than ticket price. She cites the subsequent overcapacity as the cause of the failure of airlines to cover their operating costs, as they were unable to fill up the aircraft with cheap tickets without pricing out each other in terms of discounts to business travelers.

Writing about SAS, Björnelid (2013) explores the corporate development the main competitor in the same period. He looks at the airline's development since 1980, particularly top management decisions, categorized through the various CEOs. Braathens plays little role in the book, but it underlines the challenges and choices by its closest rival in the same period. It is an important source to understand what SAS was thinking and doing since the 1980s.

Central in the narrative in both Tjomsland and Wilsberg, and Wilsberg is Braathen's upward fight against the authorities. This can be seen as a paradox, as the airline enjoyed strong government protectionism for four decades. The books can thus be interpreted at two levels. First, they point out some areas in which the government introduced policy which favored SAS, but the investigation is not systematic enough to not be accused of cherry-picking. Second, government discrimination can be interpreted as a ruse created within the corporate culture in order to emphasize the airline as an underdog. As the books are written by long-term employees, the authors may reflexively reproduce widely held beliefs within the company, whether or not these actually are true. They go far in relegating Braathens SAFE to passive agency.

⁷ Iversen (2002): 90

⁸ Tacit collusion is where two or more companies play a certain mutually beneficial strategy, for instance avoiding price cuts, without explicitly agreeing to play this strategy.

Both Iversen and Wilsberg look at corporate culture and marketing. Braathens and SAS differentiated themselves through two distinctive profiles. Braathens was the "Norwegian flag carrier", presenting itself as egalitarian and Norwegian. SAS was "the businessman's airline" and was by many Norwegian regarded as a Swedish company, due to the location of the head office. Despite the parity in size, Braathens retained its hegemony as an underdog.

Braathens has been the subject of a cadre of master theses in other disciplines, especially sociology and management. Åsheim (2004) explores the corporate culture clash in SAS and Braathens following the 2001 acquisition. The sociology thesis documented the corporate culture in Braathens both before and after the merger, allowing a peek into a less tangible aspect of the airline. The same topic was discussed by Nygård (2006). Master thesis is economics, business administration and pedagogy related to Braathens, including the aftermath of the merger, include Michaelsen (2002), Steinarsson (2002), Karlsson (2007).

1.3 Thesis question

At the heart of the interest for Braathens during its last decade is understanding why the corporation failed. Several approaches could be interesting. One could be a comparative approach between Braathens, SAS and Color Air. Alternatively, a comparison could be carried out between Braathens and Norwegian Air Shuttle—between failure and success. Another option could be comparing Braathens with international counterparts, for instance Maersk Air, British Midlands or even Canadian Airlines. The limited scope of a master thesis makes such comparisons prohibitively daunting. Within the time constraints of a thesis, I believe the most can be achieved through studying Braathens in its own right.

The detailed accounts in Wilsberg has filled a gap in the literature, detailing the line of events taking place in the company after 1995. Second-guessing or reconstructing such a description will presumably give little new insights, especially given his intimate knowledge Wilberg had of the company. Both he and other recent historians have taken up issues surrounding the corporate failure. This thesis wish to build on their material, insights and analysis, constructing upon the most promising avenues. Compared to Wilberg in particular, but also to part of the economic literature, is a desire to create a strong contextual framework to better understand the decisions made by the airline. It will thereby be possible to address some of the most promising potential causes already addressed in the literature. Combined, the goal is to either strengthen or weaken already proposed ideas for the causes of Braathens' fall. This entails that the thesis will dwell on only a few possible causes, and rather dig deeper into these.

The first issue deals with the competitive strategy on which Braathens embarked. Both Iversen, Strandenes and Wilsberg underline the inability of Braathens to create a sustainable business model. It is therefore necessary to look at which business models were chosen and analyze the consequences of it. This will invariable mean that alternative options will be examined, and parts of this inquiry will branch into counterfactual examination, i.e. what would have happened in other choices had been made. Focus will be placed on the outcome of business decisions, rather than the causes of these decisions. This allows for a better comparison of alternative outcomes, and move the analytical focus to the interaction between airlines, customers and other stakeholders. Part of this approach involves examining in some depth competitors and other external factors, at the expense internal processes within Braathens.

The second issue, which could be seen as an extension of the first, deals with Braathens' inability to either become a successful network carrier emphasizing business travelers or establish itself as a low-cost carrier. Also this idea is explored by Wilsberg, but warrants a more thorough investigation. By failing to either become a preferred carrier for business travelers or a more opportunistic airlines aiming at the leisure segment, Braathens never found a strategy which allowed them to fill their aircraft. While the first issue deals with the strategy pinned out by the airline itself, this second issue will examine Braathens more from an outside view.

The third issue deals with claims, repeated in Braathens, Fuglem, Tjomsland and Wilsberg, and Wilsberg, that Braathens was at least partially, and sometimes systematically, discriminated by the government. This has become an important part of the corporate narrative and seems to be a widely held belief amongst the employees of the company. However, there is no systematic investigation into the issue by external parities. This will done through looking at a few issues in which Braathens claims discrimination and attempting to find indications of malicious behavior form the point of the authorities.

Temporally, the main part of this thesis will examine the period from the start of deregulation in Norway on 1 April 1994 through to the bid to purchase the airline by the SAS Group on 21 May 2001. However, so much pertinent issues have their origins in the years and decades leading up, that an entire chapter will be dedicated to regulation and the process leading up to deregulation. Without the context provided there, it will be impossible to vigorously analyze the situation after the airlines were set free.

⁹ The terms network carrier and low-cost carrier are explained in more detail in section 1.6 – Fundamentals of the airline industry..

1.4 Methodology

Sources for this thesis have been selected in order to best investigate the causes of Braathens' downfall. Of particular interest is exploring which decisions were made by the company and then examining and analyzing the consequences of those choices. In order to distance this work from Wilsberg, there will be a stronger emphasis on contextual information. Although internal documents will take center stage, this means that sources external to the airline will also bear a heavy weight.

One issue which can aid in complementing the existing literature is to place more emphasis on sources external to the company. Of particular interest will be viewing the company from the point of the customers and other stakeholders, rather than that of the company itself. Newspaper archives serve one dimension of this, while another is using passenger statistics. Although only used sparingly due to the limitations in source material, this approach adds an additional dimension to understanding the airline as an actor in a market.

Braathens SAFE will remain the main protagonist. Yet it lived in an intertwined relation to its main competitor, SAS. This symbiosis was so strong that analyzing the one company without examining the other would not give a meaningful outcome. Again and again, Braathens' actions are responses to SAS' moves. More than would be normal in a corporate history, this thesis will need to include a substantial amount of information about SAS. The thesis will therefore upon occasion glance to the side and divulge on SAS, if only to provide context. This is gathered from a mix of literature and sources linked to the company.

The thesis will not have any particular focus on people, their agency and the personal interactions behind corporate choices. Although this would be a valid topic to pursue, dwelling on such issues would detract at the overall goal of exploring the consequences of said choices. Entering into a "blame game" is often futile in terms of understanding the larger picture, and can also have some ethical implications, especially where there is disjunction between the sources. A misplaced accusation against an individual is much more severe than against a corporate entity. The selection of source materials have been made in order to answer the overarching questions. This collection is of limited value in understanding personal agency in the process. The matter ends up as trade-off where the thesis prioritizes consequences over internal causes.

1.4.1 Particular caveats

A substantial part of the literature has been written by people close to the company. This has given it a rather apologetic focus. When dealing with a failure, blame rather than credit will be central to those involved. This makes the case prone to self-serving bias—the tendency for people to attribute

positive outcomes to their own efforts and abilities, and attribute negative outcomes to external factors. This is particularly the case with executives and their retrospective analysis. This is reflected in Wilberg's work, as well as for instance comments made by former CEO Erik G. Braathen in 2015.¹⁰

During the early design phases the possibility of interviewing central people in Braathens was considered, but ultimately discarded. One the one hand accessing more sources can always be an advantage, but there were some concerns. The executives had seen their story told through Wilberg. There is a concern that they would be less willing to speak freely in order to avoid contradicting themselves in the previous book. In addition, comments to the media showed a tendency to self-serving bias, and there is a concern that they, probably unconsciously, would build up the existing narrative as victims of external forces. Source criticism can be used to overcome this, but there was a real danger that the interviews could be of limited value. The last point was enforced by their narrative and the large amount of details available through Wilsberg.

Hindsight bias is also known as the knew-it-all-along effect. It is a tendency for an otherwise unlikely event to be perceived as predictable from the onset. As an extension, some sources make claims as to the inevitability of the corporate failure, i.e. that the framework was such that Braathens could not have acted in a way to survive. This posture can be held up against the extreme success of its spiritual successor, Norwegian Air Shuttle. Central to this thesis is to take a more optimistic approach to Braathens' fate and go in with an open mindset to look for possibilities for Braathens to have survived. This will invariably lead to counterfactual history. In Braathens case examining possibilities left untouched could aid in understanding the missteps. Perhaps this approach can better explain the underlying causes of the failure, simply because it gives more agency to the executive decisions.

1.4.2 Sources

A central archival depository for this paper has been the archives after Braathens SAFE at the Norwegian Aviation Museum in Bodø. Unfortunately, the archive is far from complete, with excessive holes. Certain topics and issues have many documents available, while others topics are not covered. This has both been due to the incomplete archiving in the airline, as well as dissemination of materials after the take-over. Of particular value have been memos, internal letters and correspondence written by the company's executives. In addition, a large amount of promotional material, including material aimed at partners and travel agencies, allowed a good insight into changes to services. This has allowed marketing material to be used as a primary

¹⁰ Mikaelsen (31 March 2015)

source. Another category of material is internal information for the employees. Of particular note is the newsletter, variously named *BU-stikka* (–1997), *Move* (1998–99) and *BU-nytt* (2000–), supplemented by a series of video newsletters covering 1989 to 1998.

A complete archive after Braathens SAFE Pilots' Association is available at the Norwegian Aviation Museum. Unlike the company's archive, it is more or less complete and includes such assets as board meeting minutes. The documentation was screened, yet turned out to have very little relevant to topic at hand. Most of the issues dealt with operational trivialities, which although undoubtedly important for the pilots at the time, shines little light on the broader picture.

Annual reports for both Braathens SAFE and SAS have been a good source of operating statistics, particularly tied to passenger numbers and financial performance. This has allowed comparable traffic statistics for both airlines to be compiled. Public reports, including government white papers, have allowed access to policy issues. A number of other publications have been used to derive statistics and analysis, such as white papers (*stortingsmelding* and *Norges Offentlige Utredninger*) and reports from the Institute for Transport Economics. These tend to fall somewhere in between a secondary source and literature. They have particularly been helpful in establishing context.

Airlines and planes have always captured the public imagination and newspapers therefore give disproportional high media coverage of news related to airlines compared to many other sectors of similar size. Newspaper archives have proven to be a rich source for descriptive information. They also represent a somewhat independent view on the airline, and may for instance carry the views of the passengers and politicians. Not least, newspapers often provide contemporary analysis from both editorial staff and experts.

Access to the newspapers went through Atekst. Although by no means exclusively, the most used works were *Aftenposten*, *Dagens Næringsliv* and the Norwegian News Agency (NTB). There are some recurring journalists who write many of the articles, so they have a certain familiarity with the airline industry. Of particular note is *Aftenposten*'s Cato Guhnfeldt, who has won awards for his aviation history books. Unfortunately, the left-wing *Klassekampen* could not be consulted, due to lack of digital access. Although it would perhaps have provided a more critical view of deregulation than mainstream newspapers, the lack of any index would have created an undue workload. Another important source is the weekly trade publication *Flight International*. Their articles often give a more technical approach to aviation news and more geared towards the aviation industry. It has some well-researched featured articles which are used as sources.

1.5 Structure of the thesis

The thesis has four main chapters. Chapter two looks at the process that created regulated aviation, shifting focus to the process of deregulation. This is investigated at three levels: the United States, the European Economic Community (EEC) and Norway. The chapter also presents the early history of Braathens SAFE, and places it into a wider context by examining the global phenomena of second airlines.

Chapter three ponders upon the institutional and competitive framework surrounding Braathens SAFE, discussing a combination of structures, institutions and companies. Of particular importance is the general development of air traffic in Norway and its structure, including that of airports. Developments of the two main competitors, SAS and Color Air, are explored, as are comparable Scandinavian airlines. The chapter also looks at lost opportunities for Scandinavian alliances and the push for consolidation. It finishes off by looking at passenger- and seat taxes, new marketing tools and business practices in the airline industry at that time.

The fourth chapter is dominated by its somewhat chronological presentation of Braathens from 1994 through 2001, with a particular emphasis on routes and marketing. It is structured around several central topics which are then analyzed. These include the years before 1998 with limited competition, Braathens' expansion into Sweden, alliances and new marketing approaches. A centerpiece is the price and frequency war, before concluding with SAS' take-over.

The final empirical chapter breaks up the chronological approach and dwells on several key issues which could act as causes for Braathens' demise. Unlike chapter four which places more weight on description, chapter five is more geared towards analysis. It opens by investigation the consequences of Braathens' fleet management. It then shifts focus to the dichotomy between network carriers and low-cost carriers, and Braathens inability to excel as either. Accusations of government discrimination are look at, before it concludes with an epilogue which examines the impact of Braathens failure in terms of the domestic airline industry.

1.6 Fundamentals of the airline industry

Presented here is a brief introduction to the airline industry and its terminology. By using this framework and parlance throughout the thesis, it will ease precision and portrayal of the industry.

Airline production is measured in total passengers flown, as well as in *passenger kilometers*, the factor of passenger trips multiplied by average length. These metrics, along with revenue, fleet size, total cargo tonnage flown and tonne kilometers are the most common measurements for airline

"size". Airlines produce *seat kilometers*, which are made available for sale. Like many other service industries, these are "wasted" if not sold in time. Airlines commonly measure their unit costs per produced seat kilometer. This is then matched with the *yield* or income per passenger kilometer. A critical metric is the *load factor*, the percentage of seats which are sold.¹¹

Central to any deregulated airline's profitability is *yield management*, the process by which tickets are sold at differentiated prices in order to maximize yield. This consists of two processes. *Product differentiation* is where airlines produce different products for customers with a high willingness to pay, such as providing these with business class, frills and lounges. *Price discrimination* is the process whereby airlines extract different ticket fares on otherwise identical products. Prior to deregulation, prices were fixed and discounts were strictly rule-base, making it difficult to tap into price discrimination. Airlines with a uniform service level, such as Braathens SAFE, could not carry out product differentiation.¹²

Once a flight is scheduled, it incurs only a negligible *marginal cost* (the cost incurred by producing one extra unit) for an extra passenger. At the same time passengers have a widely differing willingness to pay. The most lucrative passengers are by large business travelers. These normally want to fly during the rush hour in the morning and afternoon. They commonly buy tickets at short notice and desire flexibility to change flights on short notice if plans or circumstances change. They worry little about price. Leisure travelers are more concerned with price and are often willing to travel at more inconvenient times, buying tickets far in advance. Business travelers will normally chose plane travel no matter what, while the leisure market will quickly opt for trains, coach buses or private cars if plane tickets prices are too high. The *Southwest effect*, named for the pioneering American low-cost carrier Southwest Airlines, occurs when an airline is able to, through price differentiation, capture customers who would otherwise have chosen cars or trains. Thus lower prices aims not only to capture part of the opponent's market share, but rather to enlarge the number of fliers, including people who would otherwise not have traveled.

A common distinction in the airline industry is between that of a *network carrier* and that of a *low-cost carrier*. Few airlines adhere stringently to either category, and the concepts are perhaps best understood as a heuristic. Burghouwt and Wit (2015) go as far as claiming that most airlines have deliberately developed into a hybrid somewhere in between.

¹¹ Belobaba et. al. (2009): 47-50

¹² Belobaba et. al. (2009): 73-79

¹³ Belobaba et. al. (2009): 84-85

Network carriers operate out of one of more hubs, a major airport from which the airline offers a large number of flights to many destinations. Normally network carriers operate all their flights to or from hubs. Services between non-hub cities are provided by providing two flights, which connect at the hub. Hubs allow airlines to operate many more city-pair combinations, often many times per day. Flights can carried out using larger aircraft, thereby lowering costs. The downside is fewer direct services and having to operate two legs for many flights. The hubs increase their traffic dramatically and are thus prone to congestion and delays. Some airlines supplement hubs with a few focus cities, which offer a number of direct services to non-hubs, but the number of connection possibilities are limited, often only feeding in from the local area.¹⁴

Low-cost carriers instead offer direct flights, avoiding delays at the hub. As long as they can fill up the aircraft, they can offer these single flights at a lower cost. They avoid costs affiliated with passengers missing their flights. In some cases low-cost carriers opt to relocate to secondary airports with less congestion, often pressing landing fees to a minimum. Ryanair's flights to Torp and Rygge, both in guise of flying to Oslo, is typical. Other defining aspects is the use of a unified fleet—only having one type or even one size of aircraft. Because they target more leisure travelers, low-cost airlines can spread out their flights throughout the day, incurring better staff and aircraft utilization. Low-cost carriers pursue a strategy of attempting to gain very high load factor, often over eighty percent, compared to sixty-plus percent deemed sufficient for network carriers. They also often outsource ground operations (check-in, baggage handling and similar services) and have pioneered electronic ticket sales, eliminating the high fees paid to travel agents and computerized reservation systems. They commonly reduce or eliminate in-flight frills, such as free coffee. 15

The network model has pronounced disadvantages, creating gaps in the marketplace which low-cost carriers were able to fill. Although it can be claimed that such categorizations operate only at the theoretical level, the distinction is still relevant as it shows the multitude of strategic choices airlines must commit to. Regional carriers, operating smaller aircraft up to about 100 seats, have also grown, often filling gaps which can neither be filled by network or low-cost carriers.

Airlines plan at various horizons. Fleet management has repercussions for decades. Scheduling is carried out up to a year in advance, while yield management is short-term. ¹⁶ This means that airlines often lack short- and medium-term flexibility to meet changes in demands or competition.

¹⁴ Belobaba et. al. (2009): 122-136

¹⁵ Belobaba et. al. (2009): 122-136

¹⁶ Belobaba et. al. (2009): 153

Fleet management is the most central and important decisions taken by airlines. The fleet dictates both cost and capacity structures. Planning often commences years in advance of delivery, which itself can last up to a decade. The longevity of aircraft exasperates this, with types often remaining in service for three decades. Network carriers commonly need aircraft of different sizes, from feeder to intercontinental flights. Low-cost airlines often opt for only a single aircraft or at most a family with a common type rating. An alternative to offset some risk is leasing aircraft. With rotating dates of leases expiring and with easy reuse of aircraft, airlines can more easily adjust their fleet both through increase and reduction. Although the exact size of the fleet can be fairly easily adjusted, within limits, from year to year, choice of aircraft model is a long-term commitment.¹⁷

Airliners, that is aircraft used by airlines, can roughly be categorized into three. The most common are medium-sized jets, such as the Airbus A320 family and the Boeing 737, which commonly seat between 120 and 200 people. Regional aircraft are any aircraft with less than 100 seats. Of these, turboprops are distinguished by the use of propellers and seat anywhere up to 70 passengers. Common models include the Fokker 50 and the Dash 8. Regional jets have, like their larger counterparts, turbofan engines and seat in the range of 50 and 100 people. Intercontinental aircraft, also called wide-bodies due to their twin aisles, commonly seat from 250 or more passengers and are tailored for long range.

¹⁷ Belobaba et. al. (2009): 153-159

2 From regulation to deregulation

2.1 Introduction

The purpose of this chapter is to provide an overview of the regulated aviation sector and the transition from a regulated to a deregulated industry. A recurring theme is comparing the development in Norway with the wider situation in Europe and the United States—the first mover. Parts of the chapter are mostly contextual and deal only peripherally with Braathens SAFE. Yet, a wider framework, particularly considering the internationalization of the airline industry, will be a necessary backdrop for analysis in later chapters.

The chapter will start off with an introduction to the history and mechanisms of regulation. It will also provide a brief history of Braathens SAFE up until the 1980s, as well as the process leading to a common Scandinavian aviation regime and the establishment of SAS. To provide a more global context, the issue of a Braathens SAFE as a second airline will be explored. The bulk of the chapter is dedicated to the process leading from regulation to deregulation. It will tie together the developments in the US, Europe and Norway. Central are the smaller experimental steps taken by Norway starting in 1975 which paved way for full-out deregulation nineteen years later.

2.2 The advent of regulated aviation

2.2.1 International and Norwegian development of airline regulation

International aviation law has its basis in the 1919 Paris Convention, which established the right of all countries to regulate aviation within their borders. Norway used this as the basis for the Aviation Act of 1923, which was not significantly redrafted until 1960. Scheduled flights from Norway started in 1927, when Deutsche Luft Hansa started services out of the water aerodrome at Gressholmen in Oslo.

A 1930 government commission proposed the creation of a single, large national airline for Norway. With this in mind, Norwegian Air Lines (DNL) was incorporated by a group of shipowners in 1933.²¹ Although the first to be incorporated, start-up airline Widerøe became the first to operate a domestic air route. The service from Oslo via Kristiansand to Haugesund commenced on 18 June

¹⁸ Rhoades (2003): 14

¹⁹ Malmø (1997): 36

²⁰ Malmø (1997): 17

²¹ Nerdrum (1986): 41–45

1934.²² As in other countries, air mail stood for the bulk of revenue during the 1930s. The various postal services, as dominant customers, were often able to dictate the structure of the national aviation industry and could largely determine which airlines flew and which folded.²³ In Norway, airlines instead quickly became a political matter. In an attempt to consolidate the air traffic services, the government issued DNL a concession in 1935, thereby granting them a monopoly on all domestic flights. They were also designated as Norway's only international airline.²⁴ Stavanger Airport, Sola opened in 1937 as the first civilian land airport in the country. Oslo Airport, Fornebu and Kristiansand Airport, Kjevik followed two years later.²⁵ Although a growing industry, aviation remained of trivial importance throughout the 1930s.

The Second World War saw a number of technological developments and ended with thousands of surplus transport aircraft. This set the stage for an multilateral policy battle for the Allied countries to agree upon an international aviation regime. The US was initially bent on creating a free market, much a keen to international shipping, where airlines would be able to fly international routes between other countries—known as *cabotage*. Their European counterparts were concerned because of the strong market position US carriers could grip. Not only was the US domestic aviation undisrupted during the war, by their access to surplus transporters could give them a flying start Europeans might never catch up with. The Bermuda Agreement, signed in 1946 between the US and UK, set the stage for what would be a tightly regulated international aviation market held together through bilateral agreements. Central in air transport agreements was the designation of a carrier from each country—a *flag carrier*—holding exclusive international rights in each country. This framework is still in place, except where bi- or multilateral *open skies* agreements have been signed. These allow for essentially free competition between all carriers from both countries or blocks of countries on international routes.

2.2.2 Development of a Scandinavian airline cooperation

Civilian air traffic was entirely disrupted during the Second World War. DNL was re-established in 1946 and granted a domestic and international monopoly on scheduled flights. It initiated a cooperation with Sweden's Aerotransport and Danish Air Lines (DDL). By 1951 this had evolved into a fully-integrated airline organized as a consortium—Scandinavian Airlines System (SAS). Each government bought fifty percent of their flag carrier, with the rest remaining in private hands.

²² Malmø (1996): 18

²³ Rhoades (2003): 15-17

²⁴ Nerdrum (1986): 71–75

²⁵ Lian et. al. (1989): 12

²⁶ Rhoades (2003): 22-25

²⁷ Belobaba et. al. (2009): 25-26

These companies were reduced to holding companies for SAS, where Aerotransport owned three sevenths, and DNL and DDL owned two-sevenths. Known as the *principle of sevenths*, it became a rule of thumb for the power balance between the three countries within SAS.²⁸

The motivation behind the SAS consortium was that each of the three Scandinavian countries²⁹ did not generate sufficient international traffic by themselves. By pooling traffic into a single carrier, it became possible to generate enough traffic to support intercontinental routes. This involved building hub airports in the capitals and using these to collect passengers onwards to international routes. More marginal routes were only flown from Copenhagen Airport, Kastrup. The argument was that without a strong SAS, no Scandinavian airline would be able to stand up to major players such as Air France, British Airways, Lufthansa and KLM—all based in large population centers.³⁰ The consortium arrangement allowed SAS to become one of the major players in Europe, including on intercontinental routes. As of 1994 it held the position Europe's third-largest airline in terms of total number of passengers flown.³¹

SAS was the designated flag carrier for all international routes for all three Scandinavian countries and the world's only multi-national flag carrier. The structure of the consortium forced the three countries to operated as a single block in terms of bilateral aviation agreements and negotiate all agreements collectively.³² This had the side effect that these agreements saw Scandinavia as a single market in terms of charter flights, and allowed all Scandinavian carrier to operate charter flights out of any of the three countries. This position made it possible for Braathens to operate charter services out of Sweden, but also saw increased competition from Swedish and Danish carriers. Charter flights were never subject to concessions.³³

A concession was a privilege and obligation to operate specific routes. It specified the schedules, fares and permitted discounts. In Norway, concessions were issued by the government as orders in council. As such they were an outcome of political contemplations. Airlines needed to receive permission from the Ministry of Transport and Communications for even diminutive changes to prices or schedule times. Domestic services were regulated as packages issued to the various carriers, in such a way that in totality they were profitable for and balanced between the airlines. For instance, Braathens for the most part ran a deficit on its coastal services, which it covered

²⁸ Buraas (1972): 94-95

²⁹ Throughout this work the term Scandinavia will be used exclusively to refer to Norway, Sweden and Denmark.

³⁰ St. meld. nr. 26 1986-87: 12

³¹ BU-stikka 1996(1): 3

³² Fuglum (1994): 60

³³ St. meld. nr. 26 1986-87: 12-14

³⁴ Fuglum (1994): 59

through profits on Oslo-bound routes, a process known as cross-subsidizing. As the only airline, Widerøe received subsidies for their regional routes. The goal was that prices would be the same throughout the country and regressive by length, i.e. that the price per kilometer was reduced on longer routes.³⁵

The political rationale for the arrangement was a trade-off between the needs for safety, limited public spending, effective use of resources and regional policy. Lack of price competition was necessary to allow for cross-subsidization. This aided services along the coast and in Northern Norway without the need for direct government subsidies. The government estimated the value of cross-subsidies in 1990 to 300 million kroner, or about eight percent of the revenue of domestic main routes. It was until the 1980s widely held that price competition could be a major safety risk, as there was a fear that airlines would bypass proper maintenance and other safety measures in order to reduce their costs. In order to reduce their costs.

2.3 Braathens SAFE's early history

Braathens South American & Far East Airtransport A/S was founded by shipowner Ludvig G. Braathens on 26 March 1946. Born in 1891, he was a self-made man who grew up in a modest family. After a series of managerial positions, mostly in the shipping industry, he founded the shipping company Ludv. G. Braathens Rederi in 1926. This company would until 1994 remain the sole owner of the airline. Braathen initially contemplated starting an airline after a visit to the US 1937, but the plans were put on hold by the Second World War.³⁸

Braathen bought American military surplus aircraft after the war, initially envisioning his airline to serve international charter services. At first the airline flew charter services to the Middle and Far East. As the charter flights grew more regular, he was in 1948 granted a concession for scheduled flights. This came in conflict with SAS' privileges, who disputed Braathens' concession. After Braathens threatened to flag out, the issue was settled in 1951. The government granted Braathens domestic concessions from Oslo to Stavanger and Trondheim using a fleet of fourteen-passenger de Havilland Herons, in exchange for Braathens abandoning its international services.

For three decades ending in 1975, Norway built new primary airports covering the country, brining the total to eighteen. Leading up to the completion of each new airport, SAS and Braathens SAFE lobbied to capture the corresponding concessions. The first major agreement was reach between the

³⁵ Lian (1989): 50-51

³⁶ St. meld. nr. 47 (1991–92): 17

³⁷ Lian (1989): 50–51

³⁸ Unless otherwise noted, this section is based on Tjomsland & Wilsberg (1995)

ministry and the two airlines in 1956. Braathens SAFE was granted rights between Oslo and Kristiansand, Stavanger, Ålesund and Trondheim, while SAS received the routes to Bergen and Northern Norway. The 1957 collapse of West Norway Airlines allowed Braathens SAFE to capture the West Coast route, connecting Kristiansand to Trondheim via intermediate airports. Braathens SAFE also started serving minor airports such as Røros, Tønsberg, Hamar and Notodden during the 1950s, but few of these proved profitable and all but Røros were abandoned within a few years.

As new airports were constructed, Braathens SAFE was awarded the rights to fly to Farsund, Molde and Kristiansund, while SAS received concessions for all airports in Northern Norway as well as Haugesund. Rhetorically, SAS gradually accepted that Braathens SAFE would remain a domestic carrier, but held that it was the preferred carrier and demanded concessions for sixty percent of the traffic. Braathens argued that fifty percent each was fair. Concessions were a political consideration and the decision was ultimately decided in a subjective matter by the sitting cabinet. Once a concession was granted, there were no instances of them being removed. A 1973 government report concluded that the market had in reality been split into regions of influence, and that Braathens SAFE had slightly more than forty percent of the traffic. Braathens SAFE had a strong position in Agder, Stavanger and Møre og Romsdal, and somewhat less so in Trøndelag. ³⁹

Braathens SAFE entered the jet age in 1969 with the delivery of the 120-passenger Boeing 737-200 and as the *launch customer*⁴⁰ of the smaller Fokker F-28 jets. They sold their last Fokker F-27 propeller aircraft seven years later and would from then on have an all-jet fleet. This paved way for an even larger focus on charter, especially as a provider of inclusive tours to the Mediterranean. Ludv. G. Braathens Rederi became a major player, both in Norway and Sweden, through acquiring the major inclusive tour travel agencies Saga Tour and Atlas Resor. After Ludvig G. Braathen's death in 1976, his only son Bjørn G. Braathen took over as CEO of the airline.

2.4 Second airlines

Braathens SAFE was an example of a *second airline*, a smaller carrier imbued with lesser routes which did not operate as a flag carrier. Such second airlines were commonplace in many countries, but their nature differed significantly. Like Braathens SAFE, nearly all of them suffered their demise following deregulation. A short overview of some comparable second airlines can be beneficial to establish the context of Braathens SAFE on the world scene.

³⁹ Lian (1989): 34

⁴⁰ A *launch customer* for a given aircraft model is an honorary title awarded to the first airline to put the new model into revenue service. It has traditionally been an honor and a sign of a modern and innovative airline.

Each country's domestic aviation policy and framework diverged significantly, giving rise to a multitude of models, although all were based on a strict regulatory regime. The 1940s and the following decades saw a surge of popularity in national public ownership. The airline industry was targeted in many countries, not least because it was often being reestablished from scratch, especially in Europe. Also of importance was that airlines were viewed as infrastructure, a public good and a natural monopoly. Most commonly, national government owned flag carriers, such as was the case with for instance Air Canada, Air France, British Airways and Lufthansa. Other countries allowed a private company to continue operations, such as was the case with Swissair and Icelandair. Still others opted for the middle ground, such as with the partial state ownership of SAS, Finnair and KLM Royal Dutch Airlines. Airlines.

Some smaller countries had only a single airport of importance and often lacked any appreciable domestic aviation. For larger countries, there was a need for domestic services, and many of these opted for multiple airlines. In British parlance, the smaller ones which were not government owned became known as independent airlines.

Policymakers in Sweden and Denmark became sceptical to the prominent role Braathens SAFE was offered in Norway. There were frequent assertions that Norway was violating the SAS consortium agreement. Instead of calling foul and terminating the agreement, Swedish and Danish authorities instead opted for reciprocal action—establishment of their own domestic carrier. Sweden went first, with the establishment of Linjeflyg in 1957. Owned by SAS' Swedish holding company Aerotransport, it soon flew all but three of the busiest domestic routes. In Denmark, Maersk Air was awarded the role as second airline in 1970. To better coordinate domestic aviation, SAS, Maersk and Cimber Air then founded the cartel company Danair in 1971. All domestic tickets were sold by Danair, who again leased aircraft operations from its owner companies.

Australia opted for a state-owned flag carrier—Qantas—which exclusively operated international routes. Domestic services were operated by the state-owned Australian Airlines and the private Ansett Australia. These were kept closely regulated by means of controlling aircraft capacity through restriction on aircraft imports. They were otherwise allowed to otherwise compete freely. ⁴⁵ This regulatory regime was in many ways the opposite of Norway. Australian and Ansett were

⁴¹ A natural monopoly is infrastructure or a service with high costs tied to each operator. For instance, if two railway companies operate each their own track on the same route, they incur roughly twice the investment and maintenance costs than if only a single line had been built.

⁴² Iversen (2002): 129-130

⁴³ Sanz (2006): 34, 39

⁴⁴ Ellemose (2009): 62

⁴⁵ Button et. al. (1991): 51-57

encouraged to compete on price, service and scheduled times, but were restricted by the government on aircraft purchases and capacity. In Norway, the airlines were free to buy whatever aircraft they deemed necessary.

Canada allowed the state-owned Air Canada to fly both domestic and international routes. The private CP Air, later Canadian Airlines, was allowed some secondary routes, to compete outright on some routes, and was designed some international and intercontinental routes. They were also allowed to outright complete on select domestic services.⁴⁶

The age of deregulation immediately sent shock waves through airline ownership. An important factor was the fear of competition from foreign competitors, which led authorities to allow, and sometimes even encourage, amalgamation between flag- og second carriers. Notable examples included British Airways buying Caledonian in 1988,⁴⁷ SAS merging with Linjeflyg in 1992⁴⁸ and Air France swallowing Air Inter in 1990.⁴⁹ Quantas bought Australian in 1992. The largest US international carrier Pan Am collapsed in 1992. Its failure may have been influential in governments allowing for the merger of international and domestic airlines.

Those second airlines who survived the wave of merges through the late 1980s and early 1990s were by and large swept away around the turn of the millennium. Second airlines fell short to flag carriers with superior international networks, while being chased at the other end by innovators and low-cost carriers. The results were sometimes a buyout from the major player, such as Air Canada's purchase of the struggling Canadian Airlines in 2000.⁵⁰ Other times the second carrier simply ceased to exist, as happened to Ansett Australia in 2002.⁵¹ Even flag carriers were prone, as best noted in the bankruptcies of Sabena and Swissair in 2001.⁵²

2.5 Airline deregulation as a global phenomena

2.5.1 Deregulation defined

Deregulation is the process of removing or reducing state regulations within a sector. It is based on the premise that efficiency and choice is best achieved through a marketplace rather than through government intervention. Deregulation and privatization have close ideological ties and are often conducted in parallel, although either can be carried out independent of the other.⁵³

⁴⁶ Button et. al. (1991): 126-128

⁴⁷ Flight International (19 March 1988)

⁴⁸ Sanz (2006): 270

⁴⁹ Sedbon (24 January 1990)

⁵⁰ Pigott (2014): 253

⁵¹ Phelan (12 March 2002)

⁵² Chang & Williams (2002)

⁵³ Schröter (2005): 130

In aviation, focus has been on shifting decision making related to routes, fares, schedules, and where applicable also aircraft procurement, from the political and bureaucratic sphere to the business and market sphere. Deregulation only relaxes a particular subsets of the legal framework. It can be argued that the term is misleading, as in many aspects markets need much stricter regulations than in so-called regulated regimes. In aviation, regulations remains in force in areas including environmental and noise issues, safety, maintenance, security and consumer rights. This allows for a level playing field in areas which are politically regarded as uncompromisable. Deregulation does not necessarily overall reduce the amount of legal red tape. For instance, since deregulation many countries, including Norway, have established a separate Civil Aviation Authority.⁵⁴

Politically, deregulation was tied to the "right-wing wave" which swiped across the European continent through the 1980s. The wave emphasized a free-market, *laissez-faire* economic policy. It shifted the perception of what belonged in the public and private sphere. In particular, a number of areas which had been viewed as natural monopolies became redefined as suitable for markets and competition. This shift resulted not only in deregulation, but also wide-scale privatization. These ideas were further fueled by the collapse of communism leading to a unprecedented period of optimism for market solutions. Both in Norway, and also generally in Europe, social democrats became avid proponents of such free-market policies. Through the 1980s and 1990s there were regular changes between center-right and Labor cabinets in Norway, yet both sides carried out deregulations. A large number of sectors which had previously been state-owned monopolies or otherwise received government protection, were opened for competition. Prominent examples included radio, television, housing, finance, energy, telecommunications and rail transport. Similar processes were carried out throughout Europe and was often tied in with directives from the European Economic Community (EEC) and later the European Union (EU).

2.5.2 Early experience in the US

The first domestic airline deregulation took place in the United States. Interstate air traffic was initially under strict regulation of the Civil Aeronautics Board. Led by its new director Alfred E. Kahn under the auspice of President Jimmy Carter, airlines were from 1978 allowed to freely set their routes, capacity and prices.⁵⁷

⁵⁴ Malmø (1997): 119

⁵⁵ Schröter (2005): 127–129

⁵⁶ Hanisch et. al. (1999): 263-265

⁵⁷ Sheth et. al. (2007): 30–32

The US experience showed that airlines changed their behavior to create and utilize market power. Each airline established one or more hubs. Instead of offering a grid of direct flights, fewer flights were offered with the possibility of transferring at hub airports. More route combinations could thus be offered, at the expense of fewer direct services. Airlines built up strong "home" markets in their hub cities. Such *fortress hubs* were supplemented through control of airport landing slots, frequent-flyer programs and biased reservation systems with loyalty or override commissions to ticket agents. Major airlines merged and purchased the bulk of feeder airlines.⁵⁸

Throughout the 1980s Kahn became critical of the Reagan and Bush sr. administrations. In a view echoed by Sheth, the success of deregulation of scheduling and pricing needed to be met with more stringent regulation of mergers. Sheth calls this *secondary regulation*, where governments introduce new regulations in areas such as limiting mergers, hindering biases in reservation systems, outlawing frequent-flyer programs and banning predator pricing.⁵⁹ The lack of government opposition to all-out mergers between major carriers lead to a further concentration of market power. This is by Sheth credited as the cause of all but one of 150 start-up airlines in the US going bankrupt.⁶⁰

In 1978 there were twenty-two "legacy" carriers, who held incumbent rights to inter-state flights. By 1992 there were only nine left, reduced further to only five in 2016. Some of the companies went bankrupt, but many were bought or merged. Every single one of these has at one or other time or another since 1978 been bought up, entered bankruptcy protection or terminated operations.

2.5.3 The process in Europe

In Europe, deregulation was intertwined with the Europeanization of aviation. One major hindrance for efficient aviation operations were the arbitrary national boundaries which broke up air traffic control. The first attempts to pan-Europeanize aviation was therefore the establishment of Eurocontrol in 1960. Intended to bring efficiencies to air traffic control over Central Europe through common airways and control zones, it was mired with political resistance. A major concern from each of the national governments was that air traffic control was both a civilian and military matter. This mirrors another argument which had long been used for regulation and national control over aviation, namely military nature of any civilian aviation in case of war.

⁵⁸ Sheth et. al. (2007): 81

⁵⁹ *Predator pricing* is where a major player deliberately undercuts the price a new entrant or smaller competitor in the hope that the new company will also lose money and pull out. Even though the larger company also loses money, they hope to offset this with higher profits once the new entrant has been pushed out of the market or route.

⁶⁰ Sheth et. al. (2007): 46, 65, 82

⁶¹ McInally (2011): 11–12

The European Economic Community started looking into a common aviation market in 1977, and the Commission launched its initial proposal in 1981. The Single European Act of 1986 stated that aviation would fall within the scope of the Treaty of Rome, which would force it to be deregulated.⁶²

The judicial aspects of the transformation to create a deregulated aviation market within the EEC took place through three "packages", ratified between 1987 and 1992. The three were a step-wise introduction of deregulations in terms of traffic between EEC countries. Package 1 entered force on 1 January 1988 and first and foremost established the principle that civil aviation was subject to EEC competition rules. Package 2 took effect on 1 November 1990 and removed several regulations, such as by allowing multiple designated airlines from each country on busy routes, a limited amount of cabotage and airlines being able to an increasing degree set lower prices. It also imposed non-discriminatory restrictions on reservation systems. Package 3 came into force on 1 January 1993. Its most important features were removal of most restrictions on fares and common rules for registration of airlines and non-discrimination between approved operators. From 1 April 1997 it permitted full cabotage on all intra-EU flight, including domestic services. 63

With civil aviation becoming subject to EEC rules, a particular conundrum arose for SAS, with its Danish foot within the EEC and its Norwegian and Swedish feet outside. From package 2, airlines were designated as EEC-based or not, and granted privileges based on this. The issue was further complicated by the Norwegian and Swedish pending applications for membership in the EU or possibly the European Economic Area (EEA).⁶⁴ After negotiations started in 1988, the two countries signed an agreement to become party to EEC's aviation policy, taking effect on 6 July 1992. From this date, all Norwegian and Swedish airlines were to be regarded as EEC-airlines and saw package 3 take effect in the two countries.⁶⁵

2.5.4 Consolidation and privatization

European policymakers and airline executives looked to the US to predict how the European market would end up. The strong trend of consolidation dominated the minds of Europeans. There arose an expectation that airlines would merge and that smaller entities would be pressed out. Perhaps the best manifestation of this idea was SAS' internal program called "one of five in 95". CEO Jan Carlzon predicted the failure of his airline unless it was one of five major players in the European market. To solve his self-imposed restriction, he approached KLM, Austrian Airlines and Swissair

⁶² Rhoades (2003): 50

⁶³ Kontaktutvalget for EF-transport (1992): 65–72

⁶⁴ St. prp. nr. 69 1992–93: 10

⁶⁵ Kontaktutvalget for EF-transport (1992): 64

for merger talks in 1992. Dissimilarities in strategies, fleets, American partners and lack of a natural main hub derailed the talks and cost Carlzon his job. ⁶⁶ Similar fears became symptomatic throughout the continent, with many previous competitors scrambling to merge. Unlike in the US, Europe still held many restrictions on ownership. As with most countries, and unlike the increasing leniency offered in other sectors, airlines were deemed strategic assets which could not be owned by foreign nationals, including foreign airlines. ⁶⁷ This remains the main reason for the absence of global airline corporations.

By the early 1990s, there was still no major break-through of low-cost carriers in the US. Southwest Airlines had been successful at expanding its operations and was well-known throughout the industry as an airline which was able to cut costs. The threat of similar airlines growing and making up the main threat to incumbents was not identified by European carriers at the time. Throughout the 1990s, low-cost carriers remained minor players, and they did not have a major break-through until the after the calamities of 2001. Particularly dire examples had been the failures of Skytrain and People Express, which made it clear that most start-up, low-cost carriers would fail.⁶⁸

Privatization of airlines took place in parallel with the deregulation. Although the two had a common ideological basis, it would have been fully possible to simply allow state-owned airlines to compete, which has largely become the reality for train companies, especially outside the UK. As with many other industries, the UK government was the first to privatize, floating British Airways in 1987. Others waited much longer; Air France was not sold until 2001,⁶⁹ and the Scandinavian governments have yet to sell their half of SAS.

The national aspect of European airlines meant that hubs for the most part were in place prior to deregulation. Unlike in the United States, Europe therefore did not see the same shift in routes away from point-to-point services. However, several airlines established a second or third hub throughout the 1990s, thus increasing the number of hubs on the continent.⁷⁰

Many of the larger flag carriers scrambled to buy smaller airlines, often regional carriers. The most aggressive was Swissair's holding company, SAirGroup. British Airways was another major purchaser, although their entrance into the German domestic market through Deutsche BA was not particularly successful, despite utilizing the British Airway's strong brand name. It also bought to French airlines, TAT and Air Liberté. In addition to its partial stake in Braathens, KLM bought Air

⁶⁶ Björnelid (2013): 47–59

⁶⁷ Chang & Williams (2002)

⁶⁸ Sheth et.al. (2007): 57-58

⁶⁹ Iversen (2002): 129–130

⁷⁰ Burghouwt & Wit (2015): 105

UK, renaming it KLM uk.⁷¹ This aggression from the larger airlines reinforced the general perception that it was the incumbent flag carriers who would be a threat, rather than any start-ups.

2.6 Airline deregulation in Norway

2.6.1 Braathens SAFE's early experience with charter and competition

Although it has been established that Braathens for the most part was a regulated scheduled operator shielded from competition, certain aspects of their operations took place in a competitive market. Understanding this exposure will may aid in understanding their approach to deregulation.

Since its inception, Braathens SAFE was able to portray itself as a challenger to the larger SAS, a kind of David and Goliath situation, despite that the two were of roughly equal size in domestic operations. Braathens SAFE also used its private ownership as credibility for its stance as outsider. Yet few, if any, private companies in Norway enjoyed such a level of protectionism. The company had no head-on competition, and it could pass on any costs to the customer, underwritten by the government. Braathens SAFE thrived in an oligopoly, yet dreamed of competition. Throughout the 1980s, the airline publicly pushed for a scheme in which airlines were free to compete on routes.⁷²

Ludvig G. Braathen was always a vehement supporter of deregulation and competition in the air.⁷³ His shipping company had based itself on operating in the spot market, where the company would sell its capacity in the short run to whoever and wherever the prices were highest at any given time. This was opposed to either operating scheduled services, so-called *line shipping*, or signing long-term contracts with specific customers for a predefined, repeated route. Braathen intended to follow suit with his airline, and initially aimed at spot sale of charter traffic. He was especially preoccupied with the sudden need for spare parts or specialists to reach any conceivable location in the work, for instance if a ship broke down.⁷⁴

The airline never abandoned charter as a supplementary means of income. This exposed Braathens to a series of highly cost-effective competitors. Dedicated charter airlines provided much tighter seating and otherwise were reminiscent of low-cost carriers. In contrast, Braathens was feeding surplus aircraft capacity into the charter market. These retained many of the higher standards inherited from a network airline. In effect, Braathens was skimming the milk in periods of otherwise low travel, predominantly on Saturdays, while exploiting the low unit costs created by

⁷¹ Chang & Williams (2002)

⁷² For instance *Aftenposten* (3 April 1984)

⁷³ Braathen (1957): 7

⁷⁴ Braathen (1975): 86

their large organization. The downside was that it received less revenue than if it had used charter-specific aircraft.⁷⁵

Returning to his father's original idea, Bjørn G. Braathen set up his "own" airline Busy Bee in 1966. Legally it was a sister company of Braathens SAFE and was closely tied to the operations of the larger airline. Busy Bee operated in a competitive market, but at a smaller scale than Braathens SAFE. Early business centered around business jets. From 1975 it also took over Braathens SAFE's turboprops and became a regional subcontractor.⁷⁶

A special case was the civilian transport needs of the Norwegian Armed Forces, most of which took place within or to and from Northern Norway. The military established a flight network in 1972, consisting a mix of chartered services and routes flown by the Air Force's Lockheed Herculeses and Twin Otters. Both Braathens SAFE and Busy Bee were major suppliers to the military. They generated revenues of 58.5 million kroner, compared to SAS' 14.5 million, in 1981. The military contracts were issued through tenders and saw a head-on competition between Braathens and SAS.⁷⁷ In the first half of 1980s, SAS pulled entirely out of these charters, making them even more important for the two Braathens companies.⁷⁸ For Braathens SAFE, this system allowed them access to a number of routes which would otherwise have fallen into SAS' domain, as the military chartering allowed them to bypass the strict concession regulations on flights to Northern Norway.

During the 1980s the military chartering system came under fire, with claims that the military was undermining scheduled service. If the military had instead bought ordinary scheduled tickets, the argument went, it would aid in reducing airline operating costs and thus prices for ordinary tickets. A 1982 white paper found that the chartering allowed the military achieve high load factors and tailored flights, keeping costs down. A proposal for them to buy scheduled services, propagated by many locals, would be a *de facto* transfer of subsidies from the military to the civilian community.⁷⁹

Between them, the corporate and charter services of Busy Bee and the inclusive tour and military charters of Braathens SAFE's represented a significant exposure to competition. The group was successful head to head against SAS in these sectors, but it is not possible to say that the Braathens sphere thrived in this industry. There were periods where Braathens lost significant money on charter operations. Without the steady stream of revenue from the regulated market, Busy Bee

⁷⁵ Tjomsland & Wilsberg (1995): 131–138

⁷⁶ Learmount (1986)

⁷⁷ NOU 1982: 21: 15, 20

⁷⁸ Learmount (1986)

⁷⁹ NOU 1982: 21: 40

collapsed in 1992.⁸⁰ Within Braathens SAFE, the limited exposure to competition created a strong sense of superiority against SAS.

2.6.2 First steps towards deregulation

While people today take it for granted that airlines operate in competition, it was until the 1990s just as self-evident that airlines were regulated. It befell people naturally to complain to their member of Parliament or the government concerning unfavorable schedules, rather than to the airlines. A curious instance of this was that a late-evening flight from Oslo to Haugesund during the 1980s was flown by order of the government against the wishes and at great cost for SAS, due to pressure from local constituents.⁸¹

The nineteen years from 1975 to 1994 were a transitional period in which Norwegian authorities allowed airlines a gradual increase in autonomy. These had no bearing on Braathens until 1987, as they effected only smaller routes. More than anything, each innovation provided experience into the dynamics of competition. It also showed some of the limitations for in which areas competition could work.

The first step was the 1975 introduction of *line taxi* services. This scheme allowed airlines to operate smaller routes without concessions. They were thus free to set their own prices and schedules, granted they used aircraft with no more than ten seats on routes where no airline held a concession. The inherent *economy of scale*⁸² in aviation made this a fruitless system. Small planes incurred too high operating costs to be competitive even on niche markets. As soon as patronage rose high enough, the airline had to apply for a concession anyway in order to use sufficiently large aircraft to break into a profit. Few routes surfaced.⁸³ However, it acted as the first proof of concept for a regulatory framework in which prices, routes and schedules were not approved of by the ministry.

The next significant step was a Nordic agreement from 1981, which created the first dent in SAS' intra-Scandinavian monopoly. The agreement allowed other airlines to establish international routes between city-pairs in Scandinavia, granted that SAS did not already have or was interested in a concession on the route, and it would not capture significant traffic from near-by routes. The routes were still subject to the ordinary proceedings of concessions by all involved governments. The framework was initially not of any interest for Braathens or Widerøe, who avoided applying for any

⁸⁰ Trumpy (2012): 47

⁸¹ Reitan (2003): 57

⁸² *Economy of scale* is the cost advantage per produced unit that a company achieves due to the shier size or output of its operation.

⁸³ Lian (1989): 56

routes. Instead it was the smaller Scandinavian carriers who were interest. Norving was by far the most aggressive, securing five route concessions, but was unable to generate a profit on any of them. Otherwise, most airlines only served a single, international route and few saw much if any profits.⁸⁴

Line taxis and and the Nordic agreement were the outcome of policy shifts resulting in legislative changes. The third stage of deregulation was more diffuse and merely the outcome of choices made the cabinet. It had its background in a growing swarm of application for smaller routes which made their way to the ministry throughout the 1980s. Similar to the intra-Scandinavian applications, these were truly marginal routes, only opened up because they were not of interest for the three largest airlines. Consequentially, these routes did not have sufficient patronage to maintain profitable operations.

There are several examples of such failed services. Nordsjøfly used the line taxi clause to open a route between Stavanger and Bergen from 1977. It was awarded a route from Stavanger to Farsund and Kristiansand after Braathens SAFE pulled out from there in 1980. As was symptomatic for these minor carriers, Nordsjøfly did not break even for a single year and was liquidated in 1982. The same fate befell Coast Aero Center six years later, despite winning the routes from the new Stord Airport, Sørstokken. Fartnair folded in 1989 after fifty people perished when their Convair crashed into Skagerak. The cause was found to be fraudulent spare parts, and the incident became a world-wide scare for potential downside of deregulation if safety and maintenance was not properly addressed. Norving, Norway's then fourth-largest airline, faltered in 1990, following an unsustainable and aggressive expansion spree. The only company to enjoy success was Norsk Air. Based in Sandefjord, it commenced scheduled services in 1983 and gradually expanded its operations. Its success did not go unnoticed, resulting in the airline being bought by Widerøe six years later, and subsequently merged in.

In the big picture, the policies outlined here had no real significance. It is unlikely that any airline, perhaps except Norsk Air, made a profit on any of the resulting new services. The various airlines were largely funded through a constant flow of fresh capital form their owner, sustained only through the optimism of the 1980s. The central problem was that the airlines were only permitted to

⁸⁴ St.meld. nr 26 1986-87: 14, 43

⁸⁵ Reitan (2004): 66

⁸⁶ Norwegian News Agency (18 February 1988)

⁸⁷ Norwegian News Agency (11 October 1989)

⁸⁸ Bajak (8 December 1996)

⁸⁹ Melling (2009): 106

⁹⁰ Tjomsland (2005): 102–05, 177–181

target marginal routes. Even now, three to four decades later, these routes commonly see limited traffic, if they are at all flown. In hindsight it is easy to see that the disruptive influences of competition were tied to the largest routes. Allowing competition on smaller routes was to therefore of little avail.

The failure rate of smaller routes and airlines may have helped build confidence in that a post-deregulation threat would come from large airlines. It became increasingly obvious that the small carriers were no real threat to the big three. This was not due to lack of ambition; in particular Norving and Coast Air dreamed of flying with the big birds. But without scale and access to the most lucrative routes, it became a fruitless endeavor.

Airline failures were perhaps even more prominent in the post-deregulation period. Fred. Olsen Air Transport (ceased operations in 1997), Air Stord (1999), GuardAir (2001), Arctic Air (2003) and Teddy Air (2004) showed the difficulty of sustaining airline operation on all but the largest routes and with a large apparatus and fleet. Norwegian, SAS and Widerøe are the only Norwegian airlines to have survived from the regulated period until today.

2.6.3 Parallel concessions

For the primary routes, the first steps towards competition came with a report authored by a ministry task force led by Per Arne Watle and published in 1985. It examined the situation in the domestic aviation sector and ecommended a continuation of the 60/40-percent division of traffic between SAS and Braathens SAFE. It emphasized that the existing policy was geared towards retaining the status quo. More importantly, the report was a watershed as it recommended that in the long run, new mechanisms could be introduced to allow for more competition. It also proposed that other airlines than SAS could be allowed to fly international routes. Paraathens SAFE's director Anders C. Fougli greeted the report favorably in the press, emphasizing the importance of increased competition.

From there the issue moved quickly. The existing laws did not prohibit two airlines from operating the same route, and therefore allowed for the establishment of so-called *parallel concessions* from 1987. These were granted on the mere political preferences of the government. Parallel concessions allowed both major airlines to fly that on the three busiest routes, from Oslo to Bergen, Trondheim and Stavanger, respectively. As they invariably would prefer to fly at the same time, at peak hours,, the government allowed the incumbent to assign a certain number of departures to the new entrant,

⁹¹ Aftenposten (1 February 1997); Resser (2005): 74; Tjomsland (2005): 217; Verdens Gang (5 April 2003); Vasdal (2005)

⁹² St. meld. nr. 26 (1986–87): 21

⁹³ Aftenposten (15 March 1985)

allowing the routes to be spread out. Schedules were still approved by the ministry, and the airlines had to charge the same fares.⁹⁴

Braathens SAFE was also granted a concession to operate a parallel route to Longyearbyen. This was a rather marginal service, at the time only flown once a day. For Braathens SAFE, it held some symbolic importance, as there was a sentiment of them having been "cheated" out of the concession when it had been issued in 1975. This was founded on that the mining company Store Norske had consistently used them for their corporate charters to a temporary airfield on the archipelago. Whether or not this was a valid stance, it became an idea weaved into the corporate narrative and used internally to agitate against dissatisfaction with the government and its concession policy. ⁹⁵

SAS already flew a limited number of flights from Oslo to Stavanger and Trondheim. To Stavanger they were all international flights which continued onwards. To Trondheim they continued onwards to Northern Norway. SAS was thus allowed direct services without continuing onwards, and Braathens was allowed onto the Oslo–Bergen route. The new entrant was only given a small number of departures. In 1990, Braathens SAFE flew 24 percent of flights on the Bergen route, while SAS flew 26 percent to Trondheim and 19 percent to Stavanger. These four routes would be the only domestic services to see any form of competition until deregulation seven years later.

The outcome of the parallel concession was that in both cases the incumbent retained a very high market share. With fare and schedule regulation, there was little resembling actual competition on these services. Customers remained fiercely loyal to the incumbents and the companies were not able to grab more than a token part of the business on their new routes. By 1992, Braathens retained a 80 and 86 percent market share, respectively, to Trondheim and Stavanger. They were only able to capture 22 percent of the travelers in Bergen. In all cases the airline which flew the most often thus had a higher load factor than the new entrant, stressing the importance of lucrative time slots and the advantage of high frequency.

2.6.4 Braathens SAFE entering international routes

The government continued to encourage competition on international services throughout the 1980s. But unlike the case in domestic traffic, the goal was that competition largely would come through the establishment of new routes.

⁹⁴ St. prp. nr. 69 (1992–93): 10

⁹⁵ BU-stikka 1988(5): 19

⁹⁶ NLM/As-1003/06/Braathens SAFE D 1971–1990 Notes: "Flyavganger/uke" by Kjell Wilsberg. Dated 4 January 1990

⁹⁷ NLM/As-1003/06/L0001 Document: "Prospekt: Offentlig aksjekapitalforhøyelse og søknad om notering på Oslo Børs" (19 November 1993): 26

The watershed came in October 1985 when Braathens SAFE applied to operate four international routes, variously from Trondheim, Bergen, Stavanger and Oslo to Manchester, Newcastle, Brussels and Paris. The routes had in common that they would not encroach on the existing services of SAS, but instead offered a direct service. However, they only requested three weekly round services. This would have been too seldom to capture most business traffic, and although Braathens communicated this as a business route, it is difficult to see how these routes could be capture a significant amount of such traffic. On the other hand, it could be a way to be seen as less aggressive and thus be met with less resistance from SAS. These routes never came to be and were more a presentation of the possibilities which Braathens SAFE saw in a more competitive market.

Instead it was Billund, Denmark, which became Braathens SAFE's first international scheduled route since 1960.⁹⁹ With a daily round trip in the afternoon, Braathens' Billund route targeted a mix of leisure and business travelers. Esbjerg was an important destination due to its role as the "oil capital" of Denmark. Billund Airport had seen a recent boom as the centerpoint for Maersk Air, due not least to its more central location on Jutland than Aarhus Airport.¹⁰⁰ Compared to many other routes, Billund remained profitable and was sustained by Braathens, and saw a mix of leisure and business traffic. In many ways this route became what would later become a hallmark of low-cost carriers, where surplus aircraft capacity was put into a daily, international service targeting a mix of passengers.

The next two international routes were were launched in 1991. Malmö was served with two daily services from Oslo. The idea was to target the business segment between Scania and Norway. Although SAS served Malmö with a domestic route from Stockholm, for international services it instead put up a ferry services across Öresund to Kastrup. Braathens attempted to bypass what they in their advertisements portrayed as a major hassle. ¹⁰¹ In reality, business travelers saw the high frequency and convenience of Katrup as an asset rather than a liability. Demand for the Oslo to Malmö route remained low and was terminated after three years. ¹⁰²

More successful was the route to Newcastle which also commenced in 1991. In addition to Oslo, this route was also flown from Bergen and Stavanger. Similar to Billund, this route targeted a mix

⁹⁸ Hansen (24 October 1985)

⁹⁹ NLM/As-1003/06/Braathens SAFE utenlandske flyruter. Press release: "Braathens SAFE til Billund i mai" (dated 19 August 1989)

¹⁰⁰ Ellemose (2009): 94

¹⁰¹ NLM/As-1003/06/X Egenproduserte trykksaker: Advertisements: "Kappløpet til Malmö" and "Lang natts ferd mot Malmö". (1991)

¹⁰² Lillesund (29 April 1994)

of business and leisure travelers. It was in part chosen due to the lack of any other airline operating on the route. 103

Braathens SAFE was not alone in starting international jetliner operations. Others saw the potential for a profitable niche and Norway Airlines was in 1988 founded as what is arguably the first Norwegian low-cost carrier. Although first operating inclusive tour charters, ¹⁰⁴ both they and Braathens SAFE were in 1988 awarded a concession to operate a route from Fornebu to London Gatwick Airport. Only the newcomer chose to execute its right, with Braathens remaining passive. ¹⁰⁵ Norway Airlines pursued several partnerships with other airlines. ¹⁰⁶ The Wallenberg sphere bough a controlling stake in 1991, by which time it already controlled Transwede and the Danish airline Sterling. They were eying the lucrative Scandinavian capital triangle, the highly profitable routes connecting Oslo, Stockholm and Copenhagen. ¹⁰⁷ The group tried to entice Braathens SAFE, Finnair and Maersk Air into a larger Scandinavian alliance, but the larger carriers showed little interest. ¹⁰⁸ Norway Airlines filed for receivership on 14 October 1992, having lost about 100 million kroner during its existence. Its fleet never exceeded two aircraft. ¹⁰⁹ This became on of many smaller carriers who took up competition with the big players, just to rise and collapse in short succession.

Meanwhile the British government had given its second concession between Oslo and London to Dan-Air. Both it and Norway Airlines collapsed at nearly the same time, terminating their services on 8 and 9 November 1992, respectively. Braathens grabbed the opportunity to start a route from Oslo to London Gatwick Airport on 11 November. ¹¹⁰ This was a highly competitive service, with SAS and British Airways already serving London Heathrow Airport and British Midland later also starting flights to Gatwick. ¹¹¹

Following the collapse of Soviet Union, Braathens also saw the possibilities for targeting flights within the North Calotte. Starting on 28 January 1993, they introduced a weekly trip from Tromsø to Murmansk in Russia. This route was retained until 2000. The same starting of the collapse of Soviet Union, Braathens also saw the possibilities for targeting flights within the North Calotte. Starting on 28 January 1993, they introduced a weekly trip from Tromsø to Murmansk in Russia. This route was retained until 2000.

¹⁰³ Braathens SAFE videobrev (1991-02: 1:50-5:40)

¹⁰⁴ Norwegian News Agency (7 March 1988)

¹⁰⁵ Elsrud (24 May 1988)

¹⁰⁶ Vassbø (19 June 1991)

¹⁰⁷ Hansen (8 April 1992)

¹⁰⁸ Olsen (18 August 1992)

¹⁰⁹ Hellestøl (14 October 1992)

¹¹⁰ Dagens Næringsliv (30 October 1992)

¹¹¹ Sæthre (17 June 1997)

¹¹² Evensen (16 December 1992)

¹¹³ Lillesund (15 November 2000)

The most dramatic route was perhaps between Bergen and London. SAS closed down its Bergen to London route in 1993, instead sending passengers via three daily services from Stavanger to London. British Midland was the first to take advantage of the gap and started a daily round trip between Bergen and the British capital, with indications that it would soon increase to two daily round trips. Before that could happen, Braathens SAFE instead started its own service on the route, albeit to Gatwick. In what may seem a trivial matter today, Braathens launched its route by dumping a large number of discounted tickets onto the market. This was interpreted aggressively by SAS and British Midland, who feared that Braathens SAFE was inducing a price war.¹¹⁴

Two holiday destinations were introduced 1996, to Nice and Jersey, both summer-only. What was particular with these routes was that they did not emphasis business travelers, but were, much more than Billund and Newcastle, entirely aimed at filling up aircraft with leisure travelers during periods where the aircraft would otherwise not be utilized. This role had previously in part been done through leasing the planes to inclusive tour charters, but the industry was changing. Charter agents wanted steadily larger aircraft, and were also not willing to pay for the extra seat pitch Braathens provided. Braathens would add additional destinations to Alicante, Barcelona and Málaga in 2000, finding new uses for the aircraft previously serving Stockholm. 116

Braathens was from 1 April 1997 free to start any service it wanted to any EU airport. Yet this was done only sparingly. This contrasts with Norwegian Air Shuttle, who later built out international destinations as a major part of their network. The latter's business model is based around flying to many destinations, but infrequently, often only once or twice a week. The routes almost exclusively targeted leisure travels and were also to destinations of a vocational nature. They use aircraft capacity when not used on busy domestic services, such as the middle of the day, evenings and during the weekends. The frequency is adjusted to the number of passengers, securing a high load factor. Braathens never embraced this approach, which is favored amongst low-cost carriers.

2.7 Conclusion

Regulations originated during the advent of commercial aviation in 1919. The more stringent institutionalization took place during the 1940s, both at an international level and in each country. Norway opted to join a common Scandinavian flag carrier. Braathens SAFE, at first an opportunistic globetrotter, settled down in the early 1950s in a domestic role. It then used its weight to be issued additional concessions, settling down protected from competition. It role as a second

¹¹⁴ Valderhaug (28 October 1994)

¹¹⁵ Braathens SAFE (1996a)

¹¹⁶ Lillesund (14 June 2000)

airlines was found in many Western countries, although its framework was like all others particular to the circumstances. One of their commonalities was, however, to fare poorly following deregulation.

The loosening of regulation in Norway started in 1975 with line taxis. The following decade first saw new Nordic international routes and then several smaller domestic services operated by regional carriers. Nearly all were unprofitable, not least because they were only allowed to target marginal routes. Braathens SAFE first met domestic competition in 1987 with the introduction of parallel concessions, before venturing into international services two years later. These two provided some additional choice for passengers, but remained within the framework of the concession system and the government remained in full control. Norway was influenced by the international trend of deregulation and privatization, but in aviation and other sectors. Not least the EEC pressed for a common European, deregulated market, which was introduced in Norway in 1994.

3 Institutional and competitive framework

3.1 Introduction

Deregulation led to a significant change in the institutional framework surrounding Braathens. Just as importantly, it led to a change in the competitive situation. The purpose of this chapter these frameworks. It will for the most part dwell on structural issues and other airlines, and only to a limited degree examine Braathens directly. This is necessary to portray a wide enough context to analyze Braathens actions and situations, in particular because they are often tied to the interaction between Braathens and its surroundings.

The general trends within air travel in Norway will be explored, largely based on quantitative data, along with structural issues. Long-term rival SAS also underwent major changes leading up to and the new regulatory paradigm. Not least did it attempt at consolidating many of the Scandinavian regional carriers. But also other Scandinavian airlines became possible allies for Braathens and SAS. A widening of the scope to look at the situation in Sweden and Denmark is therefore important. Not least is it of importance to investigate Color Air and the seat tax, two factors which would cost Braathens dearly.

3.2 Traffic and airport structure

3.2.1 Particularities of airline demand in Norway

Norway's geography makes flying particularly attractive. This is not least due to the ruggedness of the landscape which interposed with fjords make construction of roads and railway cumbersome with limitations on speed. For instance, a railway was never built along the West Coast and Rauma Line was never completed to the towns of Ålesund, Molde and Kristiansund.

Despite these hurdles, road and rail has always been a viable option to in Southern Norway, not least due to the lower prices. For instance, in 1988 the nominal prices for train tickets was about half that of plane tickets on the same route. For families, packing a car full of people would significantly undercut the cost of numerous tickets.

The other geographic particularity is the elongation of Northern Norway. Travel time from Oslo to Bodø by train is eighteen hours, and Bodø is barely half-way to Kirkenes. While Hurtigruten was at the turn twentieth century praised for its speed and reliability, spending days on a coastal voyage is out of the question for modern businessmen and holidaymakers. So while air travel in Southern

Norway became an important, but expensive, supplement to conventional modes of transport, it was deemed a necessity in Northern Norway.

This resulted in several fundamental differences between operations in the two markets. First, Northern Norway had a disproportional high volume of travel per capita, compared to other parts of the country. However, because it already from the onset targeted more leisure and private trips, the growth rate for travel to Northern Norway remained lower from the 1950s and throughout the following decades. This in turn meant that the relative importance of routes to Northern Norway diminished, and was used as an argument by SAS to gain additional routes in Southern Norway, such as Haugesund. Second, price policy became more important and politicized. Even for groups with low income, air travel was regarded as a necessity in Northern Norway, while it in the south was regarded as more of a luxury incumbent upon those who could afford the added price for a few hours saved. In 1998, each person in Finnmark flew an average 5.59 times domestically per year, compared to 2.03 for the population as a whole and 0.34 times for Hedmark. Finnmark had a growth rate of 25 percent from 1987 to 1998, the lowest of any county and nearly a third of the 69-percent average for the country as a whole. Overall, Norway is the country in Europe with the highest per-capita domestic flights.

3.2.2 Air traffic growth

Airline traffic saw a huge boost from its infancy in 1946 through the 1970, with annual growth rates exceeding twenty percent. From the 1970s the growth rate declined. As a rule of thumb, which still is in effect as of this writing, growth in both domestic and international air traffic roughly doubles every decade. 121

Air traffic is tied to the general business cycle of the economy. In boom years, businesses are less worried about expenses and allow more work-related travel. They also allow more use of business class. Similarly, people spend more on vacations during good years. In bust years, there is often a noticeable decline in both business and leisure demand for travel. For domestic services in Norway, there was a 63-percent growth from 1982 to 1987, followed by only 16 percent from 1987 to 1992. The years from then until 1998 produced a 55-percent growth. In all, domestic air traffic had almost tripled from 1982 to 1998, from 3.4 to 9.4 million.¹²²

¹¹⁸ NOU 1982: 21: 33

¹¹⁹ Rideng & Denstadli (1999): 25

¹²⁰ Eurostat (2017). Values are calculated as of 2004, but the gap is so high that it is reasonable to believe this was also the case during the 1990s.

¹²¹ Rideng & Denstadli (1999): 8

¹²² Rideng & Denstadli (1999): 6

Airlines experience reduced costs with lower oil prices, and for most airlines this is favorable. Although Norwegian airlines experience the same cost reduction, lower oil prices tend to grind to a halt the growth of the Norwegian economy, and result in a noticeable drop in demand for air travel. Two important low periods in Norway was during and after the Gulf War in 1990 and 1991, and the decline of the oil price from 1997 and onwards. Globally, the main crunch for airlines came in 2001 due to the economic downturn following the dot com bubble in addition to the scare of the

Comparing figures from 1982 and 1998 and give a certain insight in the development of air traffic. The percentage of business air travel declined from 58 to 49 percent, although this was partially compensated by an increase from 8 to 12 in job commuting. Private travel increased from 34 to 39 percent. In 1998, roughly a third of all airline tickets were paid for by the traveler or their immediate family.¹²³

3.2.3 Airport policy

September 11 attacks.

Throughout the regulated period, the governing principles for aviation in Norway were a trade-off between three partially contradictory goals—effective use of resources, regional policy and minimizing public expenditure. This was largely implemented through cross-subsidization, both for passengers, airlines and infrastructure, and through regressive pricing. As there are high economies of scale tied to airport operation, only a few of the largest airports were able to operate with a profit. These were recycled back to pay for the operational deficits incurred at small airports. Combined, these measures allowed the government to build airports and establish routes to locations which would not be able to cover the costs of neither flights nor infrastructure. 124

Public airports—those which offer the infrastructure and capability for scheduled commercial flights—are in Norway commonly divided into primary and regional. Primary airport are those that can handle jet airliners. Although terminal capacity and navigational equipment is also crucial, the main determining factor is the dimension of the runway. Braathens SAFE and SAS have both concentrated nearly exclusively on primary airports since the 1960s. There were eighteen such airports built between 1937 and 1975. Since then the only new primary airports were Gardermoen (opened in 1998) and Rygge (2007), the both in the vicinity of Oslo. With the exception of Sandefjord Airport, Torp, primary airports were owned and operated by the Norwegian Air Traffic and Airport Management, a government agency which was in 2003 transformed into Avinor.

123 Rideng & Denstadli (1999): 35; 40

124 NOU 1988: 31: 29 125 Malmö (1997): 58–67

125 Malmö (1997): 58–67 126 Buzzy (17 October 1997)

127 NOU 1988: 31: 12

Nearly half the country's population falls into the catchment area of the main airport of Oslo. Similarly, the airports in Bergen, Trondheim, Stavanger and Kristiansand have large catchment areas, roughly between a third to half a million each. The remaining airports have much smaller population areas, none noticeably exceeding a hundred thousand people. This causes a small subsection of routes to carry a disproportionate number of passengers. Domestically, the routes from Oslo to Trondheim, Bergen and Stavanger have often been amongst the ten busiest routes in Europe. During the peak in 1998, the route between Oslo and Trondheim and the forth-most departures per day in the entire continent. 128

3.2.4 Fornebu and Gardermoen

Oslo Airport, Fornebu, opened in 1939, was conveniently located just seven kilometers from the city center. Its central location would over the decades shift from a blessing to a bane. The physical restraints of the Fornebu peninsula limited the airport to a single runway ¹²⁹ too short for intercontinental aircraft. The single runway became the dimensioning restraint on the airport, thereby limiting the number of slots—the right to take off or land at a given time. Slots were filled up during the morning and afternoon rush hours, creating a bottleneck for airline capacity throughout the country. ¹³⁰

Fornebu's limitations were known early, and already in 1947 a government commission proposed building a new airport. There was little interest during the following two decades, as tax money was needed for more pressing investments. A civilian terminal was however built at the military airbase at Gardermoen, which from the 1972 increasingly took over most charter traffic and some intercontinental flights. Although this quick-fix availed the problem somewhat, an intolerable two-airport solution became a new hurdle, in which passengers were forced onto an hour's bus ride to change between flights at the two airports.¹³¹

Serious deliberations about building a new airport began in the 1970s, and included several white papers. Little happened despite the situation growing nearly intolerable by the 1980s, at which time the case transforming it into a major political issue. Several locations were proposed, with first Hobøl and later Hurum as favorites. SAS, Braathens SAFE and Widerøe all favored a new airport. Although their favorite site varied throughout the years, they emphasized the importance of building

¹²⁸ Vestmo (27 April 2000)

¹²⁹ The airport had a second runway, which was built at an angle and crossed paths with the first. Because the two intersected, they could not be used independently of each other. Thus for all practical purposes, Fornebu only had one operational runway.

¹³⁰ NLM/As-1003/06/Braathens SAFE korrespondanse B 1997 1996 "Økt konkurranse innen luftfart – infrastruktur" Dated 4 January 1991.

¹³¹ Bredal (1998): 16

a new airport with two runways, to avoid the capacity restraints which remained at Fornebu. They especially opposed the idea of a continued two-airport solution, in which there would be capacity restraints at Fornebu indefinitely. The debacle did not end until 1992, when Hurum was marginally rejected in favor of an all-new airport at Gardermoen. The decisive criteria were just as much tied to the needs to avail 60,000 residents around Fornebu from noise pollution, as that tied to airport capacity.¹³²

During the six years of construction, including the first four years of deregulation, operations continued with the slot restrictions at Fornebu. With the simultaneous opening of Gardermoen and closing of Fornebu on 8 October 1998, airlines were for the first time free from runway capacity restraints in the morning and afternoon.¹³³

Although the debate regarding a new airport and deregulation were concurrent, they were essentially independent. The airport debate predated any serious deliberations concerning deregulation, and the two issues were never regarded as conditions for each other. However, it turned out that the opening of Gardermoen had much more far-reaching consequences for the airline market in Norway than deregulation in itself. The legal framework was in itself not sufficient, only when the bottleneck of flights per hour was removed was it actually possible for airlines to compete freely. Only the removal of slots restrictions allowed for the innovation which would shake the industry sufficiently, and allow a new entrant to start competing wing to wing with the incumbents. It would come to pass that the new airport Braathens fought for would cause its downfall.

3.3 Competitors

3.3.1 Developments in SAS

Unlike Braathens who passed through the 1980s with few adjustments, SAS underwent a major transformation during the decade. It started in 1980 when Jan Carlzon was hired as CEO. He introduced a new paradigm to the company through the emphasis on marketing management. In particular, he pressed for the airline to focus on frequently-flying, high-paying business travelers. He abolished first class and created an upgraded business class, named EuroClass, which was to offer first class service at business-class prices. The other members of the IATA cartel frowned at this move, instigating a conflict which at which peak SAS was denied access to France. The issue had to be resolved by the French and Swedish foreign ministers. For SAS the media attention was priceless. This and the steady steam of improvements to service quality led SAS throughout the

132 Bredal (1998): 16–28

133 Bredal (1998): 32–33; 53

1980s to capture larger shares on international routes in head-on competition with other flag carriers. SAS promoted itself as *the businessman's airline*, a notion which also stuck with the general public.¹³⁴

The downside of this, some might say excessive, focus on service, was a surge in operating costs. Larger aircraft were sold and replaced by smaller ones flying more direct services or more often. Wages rose to avoid strikes. Additional ground personnel were added to accommodate business travelers. When deregulation dawned on SAS, the airline was no longer protected by the IATA cartel to hold its prices steady, and increasingly business travelers focused on price. This was particularly evident after the Gulf War started in 1991 and the global airline market crunched. 135

SAS produced large profits from many of its international routes, especially on the lucrative Scandinavian capital triangle where they faced no competition. In part these profits were invested in non-aviation related industries, as well as to consolidate the regional Nordic aviation market. However, SAS also bought major stakes in some larger carriers. It established Spanair in 1987; at first a charter carrier, it was later transformed into a scheduled operator. SAS then bought a quarter of Britain's second airline, British Midland, in 1988, increasing to 40 percent in 1994. The consortium then went on a global purchasing spree, at the same time as it added a number of intercontinental destinations to its schedule. For some months in 1988 it owned 40 percent of Aerolinas Argentinas, just to instead invest a third of LAN Chile two years later. A portion of US carrier Continental Airlines was bought. In Europe, a strategic partnership was entered with Swissair.

Two pivotal marketing moves were introduced in 1992. The first was that SAS launched its frequent-flyer program EuroBonus. The second was the ushering of low-priced tickets sold under the Jackpot name, which made it easier for leisure travelers to secure cheap fares. SAS sold Diners Club Nordic in 1994, the turning point for its non-aviation portfolio. From then on the group gradually sold off non-central assets, particularly related to hospitality. Another asset sold that year was SAS Catering and ushered in an age where SAS would outsource peripheral tasks. The corporate ownership was restructured in 1996, whereby the three holding companies were renamed SAS Norge etc in a first step for simplify the ownership structure.

¹³⁴ Björnelid (2013): 11–21

¹³⁵ Björnelid (2013): 35–40

¹³⁶ This is outlined in more detail in section 3.4 Consolidation of airlines in Scandinavia

¹³⁷ Hall (2002): 17

¹³⁸ Chang & Williams (2002)

¹³⁹ Hall (2002): 18

¹⁴⁰ Hall (2002): 19

¹⁴¹ Scandianvian Airlines System (1997): 2

SAS conducted a rather fragmented fleet policy during the 1990s. They took delivery of just eight MD-90 aircraft in 1996. By then the consortium had already placed an order with Boeing for forty-one 737 Next Generation, abandoning its long-term aircraft supplier McDonnell Douglas. Delivery started in 1998. At that time the company underwent a re-profiling, which saw a refreshing of their livery and corporate brand. At the company underwent a re-profiling, which saw a refreshing of their livery and corporate brand.

3.3.2 Color Air

Color Air was the first domestic low-cost carrier in Norway. The airline shared its name with the cruiseferry operator Color Line—both of which were owned by Olav Nils Sunde—and was publicly announced in January 1998. Tied to the opening of Gardermoen, Color Air stated that it planned to launch one-way tickets from 500 kroner and aimed at a market share of between fifteen and twenty percent, or 1.4 million annual passengers. Color Air was a virtual airline. This meant that it did not hold an air operator's license, but instead outsourced flight operations to Air Foyle. The aircraft were leased Boeing 737-300s, ranging over time with between 124 and 142 seats. Ground handling and maintenance were also subcontracted. SAS and Braathens operated with an internal pension age of 60 and 58 years, respectively, but regulations allowed pilots to continue until 65. Air Foyle thus hired retired pilots for lower wages, topped off by corporate pensions from the two incumbents.¹⁴⁴

Operations commenced out of Gardermoen on 6 August 1998, even though the new terminal did not officially open until 8 October—the day Braathens, SAS and other airlines moved their operations from Fornebu. Color Air chose to start with a route to Sunde's hometown Ålesund, a route on which Braathens still had enjoyed a monopoly. Within a week services also commenced to Trondheim and Bergen. Color Air never entered the third of the three large domestic routes in Norway, Oslo—Stavanger.

For the traveling public, perhaps the most innovative aspects was Color Air's pricing strategy. Instead of a rigid system of round-way tickets with prices based on which nights passengers were away, Color Air sold all tickets as one-way tickets for between 470 and 770 kroner, without restrictions. They stated they were largely targeting the leisure market, particularly those visiting friends and relatives. This was a market which had previously largely been ignored by the incumbents. Even for the middle class, non-essential flying was prohibitively expensive, and Color

¹⁴² Hall (2002): 19

¹⁴³ Hall (2002): 205

¹⁴⁴ Valestrand (19 January 1998); *Dagbladet* (17 January 1998); Ottesen (16 January 1998); Ottesen (16 March 1998); Eidsten (27 June 1998); Spence (1 August 1998); Alver (21 June 1998)

¹⁴⁵ Lillesund (5 August 1998)

¹⁴⁶ Lillesund (16 June 1998)

¹⁴⁷ Commuter Regional Airline News International (16 February 1998)

Air hoped that by providing sufficiently cheap tickets they could generate a combination of traffic from people who would otherwise not travel, and capturing passengers who would have instead taken trains, buses and cars.

Color Air was a true low-cost carrier. They offered no frills and had a limited number of flights (five weekday round trips to Trondheim and Bergen, four to Ålesund and one to London). Tickets were sold through supermarkets, call centers and on the Internet, without paper tickets being issued. Check-in was instead conducted by stating a booking code and showing identification. Flights corresponded with the cruiseferry services to Kiel and Hirtshals, allowing for package deals. The airline had only three aircraft, which made it difficult to achieve economies of scale, although this was partially compensated through outsourcing all aspects of operation.

Color Air ceased all operations on 27 September 1999, after the Color Group had lost 400 million kroner or more on its aviation ordeal. Carrying 430,000 passengers in thirteen months, it lost nearly 1000 kroner per passenger. Sunde stated at the time that he believed that Color Air failed because they were unable to capture a significant number of business customers, due to Braathens' and SAS' frequent-flyer programs, Wings and Eurobonus. Despite this statement, Color Air never focused its products on business travelers. They generally struggled to fill up their aircraft, achieving only 36 percent load factor. Had they filled the aircraft with load factors equivalent to that which contemporary low-cost carriers can achieve, for instance exceeding seventy percent, it is quite likely that they had broken even.

3.3.3 Trains and bus coaches

The 1990s saw an expansion of the airlines' competitive surface, and a surge towards capturing customers which had previously traveled with other modes of transport, including cars, coach buses and trains. As a rule of thumb, once train travel time between two cities falls below four hours, it will start capturing a significant portion of the point-to-point traffic from airlines. Once down to about three hours, trains will capture nearly all the point-to-point traffic, although airlines will still capture most network travelers connecting onwards. In particular, trains can then target the lucrative business sector with passengers making a single-day trip, traveling to another city in the morning, attending meetings or doing other work, and returning in the evening. Norwegian politicians never put aside noticeable funds to allow for improvements to the intercity railway network,

¹⁴⁸ Color Air (10 March 1999)

¹⁴⁹ Dahl & Haraldsen (28 September 1999)

¹⁵⁰ Lillesund (27 September 1999)

¹⁵¹ Erikstad & Wangsmo (22 May 1999)

¹⁵² Nelldal (1998)

resulting in train times exceeding six and a half hours from Oslo to Bergen, Trondheim and Stavanger. ¹⁵³

During the 1980s, the legal framework was amended to allow coach operators more freedom, allowing them to start routes which could compete head-on with both planes and trains. ¹⁵⁴ The Norwegian State Railways was split up in 1996. They introduced the Signature tilting train service in 1999 with faster service times in the hopes of competing with aviation, but these were marred by technical issues. Travel times were not reduced sufficiently to make the trains noticeably more competitive in terms of travel time. ¹⁵⁵

In comparison, the Swedish railways were in much more well suited to challenge the airlines. Investments during the 1980s and 1990s in new lines and the X2000 train service reduced travel time from Stockholm to Gothenburg by train down to just over three hours, making it highly competitive to flying.¹⁵⁶

3.4 Consolidation of airlines in Scandinavia

The period leading up to and beyond deregulation saw a consolidation of the ownership of airlines, also in Scandinavia. On the one had SAS was an aggressive player trying to consolidate much of the Nordic market. But there were also attempts to build bridges between airlines in order to bypass the power structure in SAS.

3.4.1 Regional carriers

Traditionally SAS had focused on medium- and long-haul operations, and allowed smaller, regional carriers to operate feeder services with propeller aircraft. In Norway this had primarily been the domain of Widerøe, while in Denmark this was mostly carried out by Cimber Air, part of the Danair cartel. In Sweden, the dominant regional carrier was Swedair. SAS held minority ownerships in all three.

During the 1980s and onwards, SAS' pursued a two-fold strategy. First it established its own regional division in 1984, ¹⁵⁷ which later became SAS Commuter. This allowed SAS to take a stronger position in the regional market, especially for short-haul flights out of Copenhagen and in Northern Norway. The latter involved restructuring the flights in Finnmark into a hub system centered around Alta. ¹⁵⁸

153 NOU 1982: 21: 33 154 Losnegård (2008): 212 155 Gulowsen & Ryggvik (2004): 402–404 156 Nelldal (1998) 157 Guhnfeldt (17 March 1984) 158 Eriksen (19 June 1990) SAS bought Swedair in 1993, but it was in such a meager financial shape that SAS allowed it to enter receivership the following year.¹⁵⁹ Most of the routes were subsequently taken up by SAS Commuter.¹⁶⁰ SAS and Braathens SAFE sold their partial stake in Widerøe to Fred. Olsen in 1988.¹⁶¹ These shares were bought back by SAS in 1997 and 1998, giving SAS control over yet another regional carrier.¹⁶² At the same time it also took control of Finnish regional airline Air Botnia,¹⁶³ later renamed Blue1, and 26 percent of Cimber.¹⁶⁴

Combined, this reinforced SAS dominant market position in Scandinavia. Although an important part of regional aviation was providing point-to-point services, they also acted as a feeder into SAS' hubs. Just as had previously been done in the US, control over the feeder traffic allowed SAS to grab control over the passengers as they connected onwards of SAS' flights, strengthening their market share.

3.4.2 Linjeflyg

Similar to Norway, Sweden was dominated by SAS and a major domestic carrier, Linjeflyg. Unlike the independence of Braathens SAFE, Linjeflyg was owned by SAS' Swedish holding company, Aerotransport. Half of Linjeflyg was sold to Bilspedisjon in 1990, but was bought back in March 1992, this time with the intent of an all-out merger. The Office of the Competition Ombudsman assessed that Linjeflyg was struggling financially to such a degree that it would be probable that they would be filing for bankruptcy without a merger. This was a period of general decline in the airline industry, mostly caused by the ramifications and higher oil prices induced by the Gulf War. Sanz (2006) argues that Linjeflyg was just going through a difficult period and that there was no long-term risk of bankruptcy. The merger led to a situation in which the incumbent had a 97-percent market share on domestic traffic, only supplemented by a few regional routes. The same structure of the competition of the carrier of the competition of the carrier of the

3.4.3 Transwede and Malmö Aviation

The SAS monopoly in Sweden created a gap in the market which was quickly filled by two newcomers, Transwede and Malmö Aviation. Both airlines had by 1998 grown to a roughly ten-to-twelve-percent domestic market share. ¹⁶⁷ Unlike SAS, they were never able to operate as network

¹⁵⁹ Olsson (10 February 1994)

¹⁶⁰ Froste (16 October 1995)

¹⁶¹ Evensen (7 November 1988)

¹⁶² Snefjellå (28 November 1997)

¹⁶³ Flight International (28 January 1998)

¹⁶⁴ Aftenposten (14 May 1998)

¹⁶⁵ Sanz (2006): 270

¹⁶⁶ Jeziorski (1 April 1992)

¹⁶⁷ Braathens SAFE (1998a): 38

airlines, instead operating me-too operations on some of the busiest domestic and international routes.

Transwede was established as a charter airline in 1985 and was based at Stockholm Arlanda Airport. Its first foray into scheduled services began in 1991 between Stockholm to London. The following year it started domestic scheduled services, competing head-on against SAS on many of the heavier domestic routes. By 1997 this consisted of routes from Stockholm to Luleå, Umeå, Sundsvall, Jönköping and Halmstad. Operations were not profitable and the company reorganized in 1995, spinning off the charter division.

Malmö Aviation chose to focus on the two busiest routes, from Stockholm to Gothenburg and Malmö. Instead of Arlanda, they flew out of Stockholm Bromma Airport, located just outside the city center, giving them an edge at targeting point-to-point travelers. The limited runway at Bromma required the use of eleven smaller and quieter British Aerospace 146 regional jets.¹⁷²

3.4.4 Mini-SAS

As deregulation became increasingly evident, both the second airlines and the media started to hype the concept of a mini-SAS, a term coined in the press. The basic idea was that if the Scandinavian second airlines entered into a close cooperation, they would be better suited to take up competition with SAS. Between them, the Nordic second airlines had a firm domestic position and held strong brands in their respective markets. The downside was that they had very near non-existent international presence.

By establishing an alliance it would be possible to overcome the problem of only being able to sell to an airline's home market. This can be exemplified with the situation Braathens experienced when it later entered the Oslo to Stockholm route. On any given international route, roughly half the patronage will be residents of each of the target countries. For instance, on the route between Amsterdam and Rome, most Dutchmen will travel with KLM and most Italians will travel with Alitalia. If one of these cities is a major intercontinental hub, this may draw some additional traffic to the hubbed airline. Braathens was a strong brand name and many loyal customers in Norway. They were therefore able to capture a significant number of Norwegians on the Oslo to Stockholm traffic. But because they lacked any brand awareness or customer loyalty in Sweden, they captured near to no Swedes. SAS, with a home market in both Norway and Sweden, was therefore a

¹⁶⁸ Flight International (30 November 1985); Flight International (12 June 1991)

¹⁶⁹ Sjöblom (13 June 1992)

¹⁷⁰ Braathens SAFE (1998a): 38; Dahl (18 August 1998)

¹⁷¹ Flight International (5 July 1995); Chuter (14 January 1998)

¹⁷² Flight International (26 August 1998)

formidable foe. When the various airlines were considering pooling their resources, they were first of all trying to enter a cooperation to use their own brand to sell to their respective domestic populations.

The idea of a mini-SAS first arose in 1990 with the sudo-independence of Linjeflyg. The CEOs of it, Maersk Air and Braathens SAFE gathered to negotiate a close cooperation, culminating in a letter of intent. The proposed alliance would focus on building up traffic on the capital triangle, building upon their strong domestic market strengths. They would *codeshare* flights, in which they each would operate every other flight, but be able to sell tickets under their name and flight code on all of the pooled flights. All three airlines operated Boeing 737s and had similar operational models, which would have allowed for a tight operational cooperation and reduced costs. For instance, no additional training of mechanics or stationing of spare parts would be needed. The negotiations also included the possibility of allowing Finnair into the alliance, which would have created a Nordic giant able to take on SAS, including utilizing Finnair's intercontinental hub in Helsinki. Such a partnership could have brought the four major airlines sufficiently close together that they would have stayed a fair change of challenging SAS on both the home and at least the intra-Scandinavian market.

Braathens applied for concession to operate Oslo–Copenhagen¹⁷⁴ and Oslo–Stockholm¹⁷⁵ on 30 September 1991. Although they were not awarded the concession, it shows that Braathens was eying the capital triangle. The timing may have been part of a plan to execute a closer cooperation with the other second airlines.

SAS was not interested idle watching their competitors gang up on them. First they bought back Linjeflyg and merged. Then they placed their eyes on both Braathens SAFE and Maersk Air. SAS made propositions to buy the Danish carrier, but these were rejected by its owner, A. P. Møller–Mærsk.¹⁷⁶

Creation of a mini-SAS may have been a lost opportunities for Braathens. It could be argued that the scene was sabotaged by the Swedish authorities, who allowed the two dominant airlines to merge. Whether organized as an alliance or a merger, the three second airlines in Scandinavia had a combined position which could put them ahead of SAS in all three domestic markets. This

¹⁷³ Sanz (2006): 256-258

¹⁷⁴ NLM/As-1003/06/Braathens SAFE korrespondanse B 1997 1996 "Søknad om rutekonsesjon på strekningen Oslo – København v.v." Dated 30 September 1991.

¹⁷⁵ NLM/As-1003/06/Braathens SAFE korrespondanse B 1997 1996 "Søknad om rutekonsesjon på strekningen Oslo – Stockholm v.v." Dated 30 September 1991.

¹⁷⁶ Ellemose (2009): 153

momentum could also have been used to to garner sufficient customers to challenge SAS on the capital triangle.

But this still left the issue of an international network, a matter which would haunt Braathens in the years to come. A strong home base may have aided the airlines somewhat, but it was not the home market share in itself which was the delimiting factor for Braathens. Perhaps a mini-SAS could have survived longer than Braathens in isolation, if nothing else because it would have more capital backing it, but increasing the size would not have dealt with the underlying issues Braathens was up against. These will be further discussed in chapter 4 and 5.

3.4.5 Proposed merger between Braathens SAFE and SAS

Minister of Transport and Communications Kjell Opseth proposed in *Arbeideravisa* on 11 May 1992 that SAS and Braathens SAFE should merge, or at least enter into a partnership. His argument was that the two carriers were too small to be able to challenge any foreign entrant into the market. He stated that "SAS needs to expand its home market in order to stand equipped for the fight against the giant airlines in Europe." He feared that without a large domestic carrier Norwegian could within a decade not be able to fly internationally with a Norwegian carrier. Audun Tjomsland of Braathens SAFE rejected the proposal outright, stating that Opseth was only concerned with the interests of SAS and not the flying public. The Competition Authority stated that such a merger would not lawful.¹⁷⁸

Opseth's comments were in many ways typical for the times. Based on the experience from the US, it seemed inevitable that only the largest airlines would survive. SAS was obsessed with growing a large home market that it could protect, much akin to the fortress hubs seen in North America. In some almost twisted logic, Opseth called for the creation of barriers to competition, which undoubtedly would not benefit travelers, in order to stimulate a Swedish airline to "win" in the market. The comment does not look any better in hindsight, as SAS and Norwegian dominate the market and the European airlines remain fragmented.

There was an underlying assumption—that size matters. When Kahn pressed for deregulation in the US, he argued that airlines were well suited for competition because, once airlines reach a certain threshold that for the most part was reached, there were limited economy of scale. He also argued there were few entry barriers. ¹⁷⁹ In markets where economy of scale is decisive, it becomes excessively difficult to launch innovative products by new companies. Kahn would later backtrack

¹⁷⁷ Original: "SAS trenger å utvide sitt hjemmemarked for å stå best mulig rustet i kampen mot flygigantene i Europa." (Valderhaug 12 May 1992)

¹⁷⁸ Valderhaug (12 May 1992); Knudzen (28 October 1992)

¹⁷⁹ Sheth et. al. (2007): 26

on his assessment, ¹⁸⁰ and by the 1990s it was becoming increasingly obvious to all that size was one factor needed for success, especially if it could be combined with market power. What was perhaps not yet as obvious was the need for agility.

3.4.6 Deregulation in Denmark

With Braathens entering the Swedish market, it would have been a short step to also enter the Danish market, or at least partner with one of its airlines. Denmark deregulated last in Scandinavia, on 1 October 1995. The Danair cartel was disestablished, leaving three major players—SAS, Maersk Air and Cimber. Cimber quickly paired up with SAS as a regional affiliate and joined EuroBonus. EuroBonus.

With SAS' dominating position in Copenhagen, Maersk Air had since the early 1990s built up a base at Billund, centrally located on Jutland. Due to the limited need for domestic aviation in Denmark, especially anticipating the 1998 opening of the Great Belt Fixed Link, Maersk Air focused on international flights out of Billund, often codesharing with flag carriers. Maersk Air had many commonalities with Braathens, such as operating the Boeing 737, had SAS as their main competitor and were in 1997 negotiating with British Airways or KLM about an alliance.

Fueled by their Jutland success, Maersk Air started to play with fire when it in October 1996 introduced services from Copenhagen to Stockholm. Despite ten daily services, they failed to capture more than ten percent of the market and lost handsomely in the process. Instead of looking north to Braathens and Transwede, Maersk Air negotiated a formal partnership with SAS and joined EuroBonus. Gradually the Danish carrier pulled out of all loss-making routes, incidentally those which also SAS was flying, while SAS withdrew from Billund−Frankfurt. This suspicious activity raised the interest of the competition authorities and the airlines were subject to a dawn raid on 15 June 2000. The case ended in a conviction of illegal collusion and the two were fined a combined €61 million. Maersk Air lasted a while longer than Braathens, but was eventually sold to and merged with Sterling in 2005. Maersk Air lasted a while longer than Braathens, but was eventually sold to and

Maersk Air and Braathens would presumably have been a good match, whether through a partnership or through a merger. In the end they chose two different approaches, with Braathens

¹⁸⁰ Sheth et. al. (2007): 65, 99

¹⁸¹ Flight International (27 September 1995)

¹⁸² Ellemose (2009): 108

¹⁸³ The Great Belt Fixed Link connects Zealand and Funen. After it opened on 14 June 1998, travel time from the capital region to major cities on Jutland and Odense was cut so much that air travel no longer could compete in terms of travel time compared to cars and trains.

¹⁸⁴ Ellemose (2009): 149-150; 182

¹⁸⁵ Ellemose (2009): 251

aiming for head-on competition, while Maersk Air chose collusion. Perhaps more than anything a partnership with Maersk could have allowed the two to pressure SAS on all fronts, instead of creating calm air for the consortium in Denmark. But as with the mini-SAS proposal, it is questionable if the size issue in itself could have been pivotal for Braathens survival.

3.4.7 Consequences of the consolidation

Scandinavia experienced a large-scale consolidation throughout the 1990s. SAS wanted to build a strong home market and reduce the number of potent competitors in their domestic markets. A apt question is why the authorities permitted this consolidation. From a competitive standpoint, it is normally not permitted for the largest companies to strengthen their position through mergers and acquisitions within the same market. Few of the companies were truly in dire straits.

As seen from Opseth's comments in the previous section, SAS was held favorably by many politicians in all three Scandinavian countries. The idea of a strong airline to keep the larger players still stood strong amongst politicians, and they were willing to compromise on market power and anticompetitive behavior in order to support SAS' fight in Europe.

3.5 Passenger- and seat taxes

Passenger fees on air travel in Norway were introduced on charter flights in 1978, with some exceptions. Starting at 100 kroner per passenger per flight, it was gradually increased to 335 kroner in 1994. The tax was found to be difficult to define and was from 1994 applied to all international flights, with the rate reduced to 60 kroner. The following year the rate increased to 130 kroner and a new fee at 65 kroner was introduced on domestic services from Oslo to Bergen, Kristiansand, Stavanger and Trondheim. The fee kept changing, seeing both increases and decreases, often at short intervals. Perhaps most critically for the airlines, from 1 April 1998 the fee was changed from a rate per passenger to a rate per seat. The seat tax only lasted until 1 June 1999, when it reverted to passenger fee, albeit at the higher rate of 228 and 114 kroner, respectively, for international and domestic flights. The tax was abolished in 2002. ¹⁸⁶

The transition to a seat tax was introduced with an environmental rationale to provide airlines with a financial incentive to avoid overcapacity. However, it was only used on the heavily flown domestic routes in Southern Norway to avoid negatively impacting less traveled routes to smaller locations. Thus, only the four routes with a viable train alternative were effected, and not for instance to Møre og Romsdal or Northern Norway. This allowed especially SAS, and to a lesser extent Braathens, to

cross-subsidize their flights by using their relatively better income from the Northern Norway and Møre og Romsdal flights to compensate for the losses on the four taxed routes. ¹⁸⁷

Despite the situation where the government was encouraging competition between airlines, they admitted that the tax would deter entry by a new airline. The challenge for new entrants was that they would need time to build up a sufficient pool of customers before they could break even. Any additional costs incurred during this period would fall disproportionately at the entrant. This was exasperated by SAS and Braathens publicly announcing that they would spread the tax out evenly between all domestic flights, including those to Northern Norway, an option not available to Color Air who almost only flew on taxed routes. Minister of Finance Gudmund Restad encouraged the incumbents not to cheat, but admitted that he had not provided any mechanisms in which to enforce the political intent of the law.

From an environmental point of view, the seat tax made at least partial sense. It taxed in proportion to the capacity flown—a half-full aircraft pollutes almost as much as one that is full. However, larger and newer aircraft pollute significantly less per seat. In addition, larger aircraft pollute significantly less per seat. All in all, the tax only partially correlated with emissions and was merely a compromise chosen for its ease of calculation.

The seat tax shows the somewhat incoherent aviation policy during the 1990s. On the one hand there was a desire to create a more efficient airline services through the use of competition. If successful, it would invariable press down prices and thus increase demand for air travel. On the other hand, the government wanted to use financial incentives to dissuade residents and companies from polluting. Airline seat taxes were only one of several pollution taxes that were enforced. Meanwhile the passenger and seat taxes were officially classified as fiscal taxes, i.e. taxes which were levied with the intention of collecting revenue for the state, rather than to influence behavior. Such taxes are normally collected on products which are regarded as luxuries. If this was the real incentive behind the tax, it was defining air travel as a luxury rather than a necessity. This was perhaps most evident as it dictated that only four routes were targeted, avoiding making it an antiregional legislation.

In the end the tax first and foremost acted as a fiscal income and a restraint on competition. It became a mechanism for the two incumbents to hold on to their market power and a barrier of entry for Color Air. And because of its poor design, it was levied just as much on those who had to fly as

¹⁸⁷ St. prp. nr. 1 (1998–99): 56–57

¹⁸⁸ St. prp. nr. 1 (1998–99): 56–57

¹⁸⁹ Lillesund (6 April 1998)

¹⁹⁰ Johannessen (30 April 1998)

those who chose to fly. Due to the somewhat irrational and artificial competitive situation that arose, the revenue came straight out of the coffers of the airlines, rather than from the business passengers it was trying to target. By the time the tax was waived, the damage had already been dealt.

3.6 New marketing strategies

3.6.1 Frequent-flyer programs

Airlines create frequent-flyer programs in order to strengthen customer loyalty. As customers often have the choice before any flight of multiple airlines, creating loyal customers make them less sensitive to price. The underlying mechanism behind frequent-flyer programs is that it gives higher rewards to passengers who fly more with the issuing airline. This is commonly achieved through customer tiers, granted for passengers after they have flown a give number of flights or flown miles. Each tier comes with additional perks, ranging from priority reservations to free access to lounges. Once a customer has reached an elevated tier with a given airline, they will have an incentive to continue to fly with that airline in order to take advantage of those perks. In effect, airlines provide better service to passengers who fly often.

In addition comes a system of bonus points (sometimes called miles) which are accumulate with each flight. These points can be converted in to free flights. Part of the controversy surrounding frequent-flyer programs is that many people accumulate points based on flights paid for by their employer, but cash out the points on private flights. The programs are stronger when aimed at business travelers, as these often are not paying the fare themselves, and are willing to send increased ticket prices on to their employers in order to cash more bonus points.

3.6.2 From cartel to alliances

Under regulation, airlines were not in head-to-head competition. This caused them to be preoccupied with customer satisfaction, rather than cost reduction, especially on international routes. Flag carriers collaborated through the International Air Traffic Association (IATA) cartel, which set prices, frequencies and service levels on international routes. Often a given international route had two airlines flying, one from each country. Through IATA, airlines would agree on prices on any given route, in order to curtail any price competition. This was lessened from 1984 when international agreements were made that started to curtail IATA's power. Yet the issues persisted until the conclusion of package 3. 191

¹⁹¹ Rhoades (2003):

By shifting from cartels to alliances, airlines sought out a new way to collude without breaking antitrust regulations. The alliances are allowed because they are made up of airlines which first of all do not have an overlapping home area, and secondly because these alliances can compete with each other.

The first significant steps towards global alliances came with partnerships between US and European airlines. SAS for instance partnered with Continental Airlines in 1988, and even bought 18,4 percent of the American airline. By moving its New York flights from Kennedy to Newark, SAS could send its passengers onwards to any major US destination through Continental's network. A similar arrangement was made between KLM and Northwest Airlines in 1989. Not only did KLM buy thirty percent of the US carrier, but from 1993 the two were granted antitrust immunity. The first trans-Atlantic open skies agreement was signed in 1992 between the US and the Netherlands, allowing for a further integration between the two airlines. Due to airlines being valued as strategic assets, most countries have restrictions hindering foreigners, including foreign companies, from holding controlling shares in airlines. Such restrictions on both sides of the Atlantic hindered any possibility of any all-out merger between US and European airlines.

The failure of the proposed merger between SAS, KLM, Swissair and Austrian emphasized the difficulty of amalgamation. While this had been easy to conduct within countries, ownership restriction and difficulties with establishing a central hub meant that all-out mergers had to wait until after 2001.¹⁹⁶

Perhaps just as important was that global aspect of the airline business—the need for alliances did not stop at the Atlantic or Bosporus. The first major attempt to solve the stalemate was the Star Alliance. Announced on 14 May 1997 by SAS, Lufthansa, United Airlines, Air Canada and Thai Airways, it created a permanent worldwide partnership between major carriers, and a close integration which was able to reap many of the advantages which would otherwise have befallen a merger. Within three years, the other two major global alliances Oneworld and SkyTeam had been founded.¹⁹⁷

¹⁹² Bjönelid (2013): 30

¹⁹³ Most countries have laws hindering anti-competitive behavior, including collusion or cooperation between companies who operate in the same sector. Antitrust protection allows companies to legally cooperate despite nominally being competitors.

¹⁹⁴ Gudmundsson (2014)

¹⁹⁵ Chang & Williams (2002)

¹⁹⁶ Transnational airline mergers became much more common after 2001. For instance, Lufthansa has since then bought Brussels Airlines, British Midland, Austrian and Swiss. KLM was bought by Air France to create Air France–KLM in 2004. British Airways, Iberia and later Aer Lingus merged to form International Airlines Group in 2011.

¹⁹⁷ Lazzarini (2007)

Alliances included features such as shared earnings of frequent-flyer points, extensive codesharing, joint use of lounges and co-location at the same terminal at major airports, and deliberately feeding into each others hubs. The overall goal was to create customer loyalty and to lock the customers to the alliance rather so much as to the airlines. With the global reach of a given alliance, customers with many international flights were able to conduct all or near all flights within their preferred alliance, lessening competition. Especially frequent-flyer programs were important, with emphasis on creating loyalty to the alliance rather than the airline.

3.7 Changes in business practice

3.7.1 Fall of the conglomerate

The idea behind conglomeration is that a company can reduce its risk if it holds investments in different industries. Such spreading of risk, or *diversification*, was especially popular with companies with concentrated ownership, such as family-owned corporations. It was not uncommon for airlines to own or operate a large portfolio of associated companies, often tied to the travel and hospitality sector. Ludv. G. Braathens Rederi had since the 1960s owned charter agencies Saga Tour in Norway and Atlas Resor in Sweden. Braathens SAFE further operated services such as airport coaches and travel agencies. Braathens Helikopter was incorporated in 1989 to serve the offshore market. Until 1992 the Braathens Group also contained the Busy Bee. Compared to contemporary practices, Braathens was also highly vertically integrated—whereby most aspects of the operations were carried out by the company itself rather than by independent service providers. Braathens SAFE operated its own aircraft and engine maintenance center at Sola, and kept ticket sales and ground handling within the company.

Following the appointment of Erik G. Braathens in 1989, Braathens increasingly took steps to streamline their operations. ¹⁹⁹ When Busy Bee filed for bankruptcy on 17 December 1992, instead of founding a new subsidiary, Braathens allowed the employees to found a few company. Named Norwegian Air Shuttle, it was able to cut the hourly fee charged to Braathens from 17,000 to 12,000 kroner. ²⁰⁰ This represented a shift towards a more American approach to regional airlines. In Europe regional flights had normally been carried out through subsidiaries or sister companies, such as was the case with Busy Bee or SAS Commuter. Norwegian Air Shuttle was instead an independent contractor, similar to the way major American airlines purchase their regional operations from specialized, independently-owned operators, often called affiliate airlines.

¹⁹⁸ Asgaut (1989)

¹⁹⁹ Tjomsland & Wilsberg (1995): 305-307

²⁰⁰ Trumpy (2012): 47-54

Traditionally the offshore helicopter market for flying personnel to oil fields had been regulated, and Helikopter Service had been granted a monopoly on these routes. Bjørn G. Braathen had in 1982 applied for a concession to be able to compete with the incumbent. It was vehemently supported by the oil companies, who wanted to add a competitor to leverage lower prices. A concession was granted in 1983,²⁰¹ although Braathens Helikopter was not founded until six years later²⁰² and did not commence operations until 1990. Within three years it had reached a thirty-percent market share, before being sold to its main competitor. The Braathens family cashed in 170 million kroner in the deal.²⁰³ The proceedings were largely used to increase the capitalization in Braathens SAFE by allowing the family to participate in the initial public offering later that year.²⁰⁴ With increased competition, the airline was in need of increased capital, and it was forced to reduce its breadth to focus on a new trend—*core competency*. This trend saw companies reduce its operations to a smaller set of operational areas, and then place capital and other resources into this limited band.

While just as vertically integrated, the SAS Group was much more of a conglomerate than Braathens SAFE. This was particularly the case through the 1980s under the leadership of Jan Carlzon. He went on an investment frenzy, purchasing the International Hotels chain, car rental and hospitality companies, and even ventured into Diners credit cards. Also there the trend shifted in the 1990s, with SAS increasingly venturing into other airlines and away from auxiliary sectors. Yet, the SAS Group remained a conglomerate throughout the 1990s, with its investments in other areas providing capital and cash flow through periods when the airline operations were turning out losses. Liquidating these assets later became an important supplementary source of income.

3.7.2 Outsourcing

Outsourcing is the practice of taking part of a company's operations and subcontracting it to an independent company. There are several arguments for this practice. In some areas, the subcontractor is a more specialized operator, who can achieve higher economy of scale or otherwise has better expertise, and can thus produce the service at lower cost. The second is that outsourcing can free up capital which can be invested into the core operations. Finally, outsourcing can abolish former employee privileges, and thus becomes a means of bypassing labor agreements and pressing down wages. Outsourcing is controversial. In part it is met with resistance due to the savings often

201 Aftenposten (1983)

²⁰² Asgaut (1989)

²⁰³ Knudzen (1993)

²⁰⁴ Olsen-Hagen (2014): 90

²⁰⁵ Björnelid (2013): 11

²⁰⁶ Hall (2002): 19

coming at the cost of the employees through reduced wages or other benefits. The other is that the company may lose strategic and necessary competence within the organization for those activities which were subject to outsourcing.

In aviation, outsourcing has most commonly been seen within ground handling and maintenance. Closely related is also the practice of leasing aircraft. As in many sectors, also information technology has been outsourced. Airlines have responded in two ways to the trend, in addition to simply carrying on as before. Some, led by the new low-cost carriers, outsourced all areas in which they envisioned cost savings. Others saw the opportunity to capitalize on other carriers' outsourcing, and instead reorganized their own operations in order to provide outsourced services.

3.8 Conclusion

A particularity of Norway is its high traffic levels per capita. In parallel with deregulation came the decision to build Gardermoen, which in 1998 removed capacity restrains from Oslo-based flights. This paved way for a low-cost competitor, Color Air, who was able to keep flying for fourteen months. Both they and Braathens were hindered in part by a new seat tax which raised the cost of flying.

Braathens SAFE followed a number of international trends, such as the introduction of frequent-flyer programs, deliberations into alliances and an increased focus on capturing new traffic from coaches, trains and people who would otherwise not have traveled. Meanwhile the competitive landscape was changing; SAS built strength through consolidation of regional carriers and founding the world's first global airline alliance. In general, many of the innovations which followed deregulation in the United States came to Europe, and with SAS an early adopter. Their adaptability became an additional hurdle for Braathens, who needed to keep up.

4 Routes and marketing

4.1 Introduction

The purpose of this chapter is to explore the main business strategies employed by Braathens SAFE between 1994 and 2001. These were in constant change; at no other time since its first years did the company change so rapidly. The development will be presented somewhat chronologically, but divided into sections tied to particular aspects of routes or marketing. This subdividing will make it easier to analyze each approach as to whether it aided or harmed the airline's survivability. It is the execution and consequences of each choice which will be dwelt on, rather than the causes of these choices being made. This chapter emphasizes Braathens as the main protagonist, but it will as always be necessary to upon occasion glance at its competitors to see the full picture.

The chapter starts off with a look at some of the corporate developments in Braathens not covered in chapter 2 and 3. It then investigates the first, rather calm period of deregulation, before shifting focus to marketing and alliances. A sidestep is then taken to explore Braathens foray into the Swedish market. It then returns to Norway to look at Best and Back, followed by the price- and frequency wars after Gardermoen opened. The chapter concludes with a brief summary of SAS' take-over.

4.2 Corporate affairs

4.2.1 Changes to managerial approach

Since its inception, Braathens SAFE had been a subsidiary of Ludvig G. Braathens Rederi, a shipping company owned first by Ludvig G. Braathen and later his son and sole heir, Bjørn G. Braathen. Ludvig's education consisted of vocational commercial school and he never took any higher education. This contrasts with Erik G. Braathen, who had concluded a higher business administration education in the United States. The 1980s was a time of transition within corporate processes, and the return of Erik from the US in 1983 ushered a period of gradually more Americanized business practices in Braathens SAFE. He immediately took up a central position in the executive management and became CEO from 1989.

²⁰⁷ Tjomsland & Wilsberg (1995): 24–25 208 Tjomsland & Wilsberg (1995): 305–307

A major change to the corporate policy came in 1987, with the introduction of management by objectives.²⁰⁹ Internally this was communicated to the employees at the time of the order of twenty-five new aircraft. It was, among other means, communicated through the internal campaign with a goal of "15 kroner on each 100-bill", indicating that the company needed an operating margin of fifteen percent to cover its capital costs. At the time the company was operating at only half this rate. The order of new aircraft would incur higher capital costs while lowering operating costs, mostly tied to reduced fuel burn and maintenance.²¹⁰ The low margins is an indication that the company was not generating sufficient revenue. However, by then the old aircraft were often written off. It is fully possible that the reduced operating costs with the new aircraft in itself would raise the margins through their lower operating expenditures.

4.2.2 Public listing

The next major US-inspired policy change came in 1994. Ahead of the deregulation, the family was concerned about the capitalization of the airline, and that they would need significantly more capital to operate in competition. Also the purchase of new aircraft strained the airline's finances. The first stance was the sale of the helicopter company, funds which were turned around by Ludv. G. Braathens Rederi to buy more shares in the airline. This was carried out through an initial public offering, in which new shares were issued and the company floated on the Oslo Stock Exchange. This brought in 400 million kroner in new share capital, of which Ludv. G. Braathens Rederi bought shares worth 100 million. Braathens Rederi bought

For the first time the Braathen family no longer owned the entirety of the company, having their ownership reduced to 69 percent. Although the family consolidated its aviation business into the main airline, it also moved part of its investments into other sectors. The first major step was the 1996 purchase of part of Kristiansand Zoo and Amusement Park.²¹³

After a temporary peak in 1986, the popularity of listing on the exchange had fallen and remained low until 1994. That year saw a surge in the popularity of floating companies, and in the next four years the number of listed companies doubled.²¹⁴ Braathens SAFE therefore became part of a general trend of companies going public.

²⁰⁹ Management by objectives is, simplified, a managerial paradigm in which managers set measurable goals for their subordinates, and then give them relative freedom on how to attain those goals.

²¹⁰ NLM/As-1003/06/L0007 Document: "25 nye fly – 15 kroner på hver hundrelapp"

²¹¹ Olsen-Hagen (2014): 90

²¹² NLM/As-1003/06/L0001 Document: "Prospekt: Offentlig aksjekapitalforhøyelse og søknad om notering på Oslo Børs" (19 November 1993)

²¹³ Berglihn (1996)

²¹⁴ Ødegård et.al. (2008)

4.3 Early domestic competition in Norway

By the early 1990s Braathens SAFE had gotten cold feet and were actively lobbying against competition, while SAS was in favor.²¹⁵ Pressed by the EEC framework which would eventually force deregulation upon the country, Kjell Opseth pressed through an early deregulation. In the end only the Socialist Left Party and the Center Party opposed the arrangement. The former protested from an environmental aspect against the goals of more aviation, while the latter was opposed to the Europeanization process.²¹⁶

Deregulation officially took effect on 1 April 1994. However, in practice all changes to pricing and scheduling took effect on Monday 5 April, the day the summer schedules were introduced. ²¹⁷ ²¹⁸ Both Braathens SAFE and SAS made changes to their schedules that date. The most prominent was that Braathens SAFE introduced flights from Oslo to the three busiest airports in Northern Norway – Bodø, Harstad/Narvik and Tromsø. At first they only received two daily round trips each, but this was later increased. The airline also doubled its frequency on the Oslo to Bergen route from four to eight daily round trips. To free up sufficient aircraft and crew, the Oslo to Malmö route was terminated. ²¹⁹

The direct service from Bergen to Bodø, Harstad/Narvik and Tromsø was terminated. Instead, Trondheim Airport, Værnes received a much more prominent place in the network, and became a sort of mini-hub (or *focus city* in American parlance) acting as a transfer for passengers connecting between Western and Northern Norway. The emphasis on Trondheim had been going on since the fleet rearrangement in 1986, but became much more prominent from 1994. From then Braathens attempted to streamline their operations by reducing the number of direct services and multi-legged flights. Similarly, more passengers were routed via Oslo.²²⁰

SAS chose to not introduce any new routes. Instead, they increased capacity on the routes from Oslo to Stavanger and Trondheim, and between Bergen and Stavanger.²²¹

For the ensuing four years, until the opening of Gardermoen, the route structure remained mostly unchanged. The limiting factor was runway capacity at Fornebu, and the airlines were stuck with a constrained number of morning and afternoon flights which they had to allocate in the most

²¹⁵ Guhnfeldt (23 April 1993)

²¹⁶ Norwegian News Agency (7 June 1993)

²¹⁷ Network carriers typically change their schedules in on a coordinated basis on or near the 1 April and 1 October each year. This creates two schedules, commonly known as the summer and winter schedules.

²¹⁸ Valderhaug (5 April 1994)

²¹⁹ Braathens SAFE (1995a): 28

²²⁰ Braathens SAFE (1995a): 28; Valderhaug (20 January 1994)

²²¹ Scandinavian Airlines System (1995): 7

profitable manner. These four years therefore only saw competition on eight routes, the six busiest routes out of Oslo as well as flights between Bergen and Stavanger, and flights to Longyearbyen. Because Fornebu was filled to capacity also prior to deregulation, there was very little capacity added to the market in 1994.

Both airlines gained from the *status quo*, and neither saw much hope in gaining large customer groups through a price war. The consequence was that there ensued four years of rather limited competition. Lian discussed this in his 1996 paper, and concluded at the time that there was little hope for any price competition when there were only to companies in a market, based both on empirical evidence and economic theory.²²² Strandenes described the situation as tacit collusion—where the two companies set their prices as if they had agreed to split the market between them, rather than competing.²²³

Using passenger statistics for both Braathens SAFE and SAS is one way to look at the development in the market. Statistics for domestic operations have been extracted from annual reports and tabulated in appendix B. Financial metrics are only available in aggregate for the whole company, so while they can be used to compare Braathens from year to year, it is difficult to make a comparison between the two airlines, or to extract exact revenue values from domestic operations.

With the first year of comparative statistics, in 1995, Braathens and SAS were of roughly size in terms of revenue passenger kilometers (RPK). However, when just the number of passengers (pax) is examined, Braathens has about a sixty-percent market share. 1993 was the last year entirely under regulation and 1995 was the first year entirely made up of figures derived from deregulated operations. Comparing the two can therefore give some immediate insight into the impact of deregulation on both airlines. SAS actually sees a marginal reduction in RPK, while Braathens sees a 24-percent increase. However, its increase in pax is only 16 percent. For both airlines, this can be explained by them moving into new market. Braathens started flying on the relatively long routes to Northern Norway, while SAS started flying more heavily on the shorter routes within Southern Norway.

For Braathens as a whole, the period from 1992 through 1997, the last full year before Fornebu opened, was one with an average seven percent annual growth rate in pax and nine percent in RPK. This was matched in an equivalent increase in available seat kilometers (ASK), which increased by a total 46 percent in the period, exactly the same figure as the increase in RPK. This meant that

²²² Lian (1996)

²²³ Strandenes (2004)

Braathens was able during the period to keep the load factor constant and thus kept control over its costs.

4.4 Alliances and frequent-flyer program

Although the first four years of deregulation saw little competition, both airlines had their eyes fixated on the opening of Gardermoen. Both realized that added capacity would lead to more of a head-on competition. Ahead of this, the two airlines therefore took a firm stance to position themselves. This was also influenced by the knowledge that the third deregulation package would take full effect on 1 April 1997 and they could be challenged on international routes and by foreign carriers on domestic services.

4.4.1 BRACard and British Airways

Braathens launched its frequent-flyer program BRACard in 1985, initially as a cooperation with Inter Nor Hotels and Avis. In its original inception, it gave booking priority and other minor advantages with the airline and hotel for customers who flew at least twenty-five yearly flights. It initially did not include any system of bonus points.²²⁴ BRACard was launched four years after American Airlines' AAdvantange, the first-ever such airline program,²²⁵ and seven years before SAS launched its EuroBonus.²²⁶

Braathens SAFE and British Airways (BA) entered into a marketing cooperation in October 1988. Braathens started to sell and market BA tickets through their own ticket offices. This was the first time Braathens SAFE sold tickets for another airline. In exchange, British Airways started selling Braathens SAFE's tickets through its office worldwide, except in the UK.²²⁷

Although Braathens SAFE moved first, SAS was much more successful with its EuroBonus. By 1995 the pressure was mounting on BRACard due to the rival's success. The main downside with BRACard in its original inception was that while most of the point collection for both airlines took place on domestic and other "boring" routes, passengers wanted to redeem their points to exotic locations, often with their families along. Braathens SAFE fared ill with its allurement of Ålesund, when SAS could entice its customers with New York and Tokyo. When price and service were otherwise viewed as equal, EuroBonus became pivotal for SAS to cajole some additional customers.

²²⁴ Aftenposten (16 September 1985)

²²⁵ Button et. al. (1991): 37-38

²²⁶ Hall (2002): 19

²²⁷ NLM/As-1003/06/Braathens SAFE utenlandske flyruter. Untitled letter dated 5 September 1988.

To level the playing field, Braathens SAFE presented British Airways as a partner on 1 October 1995. The new arrangement allowed BRACard-holders to both collect and redeem point when traveling with BA. It also meant that members of BA's Executive Club could collect points on all Braathens SAFE's flights.²²⁸

The partnering went beyond marketing, as Braathens SAFE also sold ground handling services to BA. This integration involved training Braathens employees into the service requirements of BA, further integrating the two companies. British Airways operated two routes out of Norway, from Oslo and Stavanger. In both cases Braathens acted as a feeder service onwards to other Norwegian destinations.²²⁹

4.4.2 KLM and Wings

After having negotiated with both British Airways and KLM, Braathens opted to enter a strong partnership with the Dutch flag carrier. The agreement was signed in August 1997 and implemented during the following months. Similar to its arrangement with Northwest Airlines, KLM received a thirty-percent ownership stake in Braathens. Unlike the initial public offering three years earlier, this was a sale of shares from the Braathens family to KLM, so the deal did not raise any new capital. Consequently, the arrangement with codesharing and frequent-flyer cooperating between Braathens and BA was terminated. The frequent-flyer program was renamed Wings. ²³¹

The central part of the arrangement was that Braathens would tie KLM into its network. Passengers traveling beyond Scandinavia and London would be fed into KLM's hub at Amsterdam Schiphol Airport and connect onwards with KLM. Between them, KLM and Braathens connected Amsterdam to Oslo, Bergen, Stavanger, Kristiansand, Stockholm, Gothenburg and Malmö.²³²

As what would become known as the Wings Alliance grew, Braathens tied up with three other airlines in the KLM sphere of influence. Flights to London were from April 1998 moved from Gatwick to Stansted. This gave Braathens better slot times while allowing it to offer connections with KLM UK. After KLM and Alitalia joined forces, Braathens commenced two daily services from 30 October 1998 to Milan Malpensa Airport, which offered onwards connections throughout Alitalia's network.²³³

²²⁸ NLM/As-1003/06/L0002/5 Egenproduserte trykksaker. Pamphlet: "Vår nye verden: Verden rundt med BRACard" (undated, 1995)

²²⁹ BU-stikka (1997-01): 22

²³⁰ Braathens (1998a): 6

²³¹ Move (1999-01): 4 "Den korteste veien til de lengste bonusreisene".

²³² Braathens (1999a): 5

²³³ Braathens (1999a): 43

Independent of KLM, Braathens SAFE also entered a cooperation with Finnair, with codesharing on flights to Stockholm and Helsinki. This not least allowed Braathens SAFE to fly once less to Stockholm, and could instead use the aircraft and slot at Fornebu for an extra departure to Bergen.²³⁴ This shows not least how valuable each of the rush hour slots were at Fornebu, and who it forced the airlines to meticulously manage the precious resources.

The most offensive but also least successful move was the cooperation with Northwest Airlines. Following the opening of Gardermoen, Northwest introduced a daily intercontinental services between Oslo and their main hub at Minneapolis/Saint Paul. From there they offered connections to 66 destinations in the US and Canada. The route started in June 1999 and terminated only four months later, in October. It never achieved the desired patronage. Although centrally located in the US, Minnesota was far from the East Coast and saw few point-to-point passengers. The idea was that Braathens would be able to bypass Amsterdam and operate directly to North American, saving trans-Atlantic flight time and offering one less leg for many destinations. Yet the unattractiveness of Minnesota, compared to SAS successful flights to New York, showed how Braathens kept falling behind SAS on the international scene.

4.4.3 Comparison with SAS and the Star Alliance

While Braathens SAFE was partnering with British Airways, SAS started a closer cooperation with Lufthansa. This eventually led to the Star Alliance, and placed SAS at center-stage for the first truly global alliance. By late 1997 the situation had arisen in which Braathens was first and foremost promoting international services via Amsterdam, and a limited number of daily services out of Oslo, to London, Billund and Stockholm in addition to the Dutch capital, as well as Milan and Helsinki via codesharing.

SAS had a much more extensive network out of Oslo and was able to transport many of its customers directly to their destination. This was a central weak point for Braathens. Central European cities such as Copenhagen, Paris, Brussels or any German city was not available through their network, unless the passenger opted to travel via Amsterdam. The situation was no better in Stockholm.

Braathens SAFE tried to play up the value of Amsterdam Schiphol Airport as a global hub. In its promotional material, is emphasized how superior it was to SAS' hub at Copenhagen Airport, Kastrup in terms of number of destinations.²³⁷ While true in isolation, this side-stepped SAS

²³⁴ BU-stikka (1996-04): 16 "Rutesamarbeid på Stockholm-ruten".

²³⁵ NLM/As-1003/06/L0007 Slide series: "Hva betyr Gardermoen for trøndersk næringsliv".

²³⁶ Moberg (1999)

²³⁷ NLM/As-1003/06/L0007 Brochure: "Enda bedre hjemme – Mye sterkere ute".

advantage. Copenhagen was better connected than Amsterdam to Scandinavia, both in terms of number of flights and in number of cities served. Flights times were also shorter, and for many destinations gave overall shorter flight times. For those heading to more marginal destinations, it was Lufthansa and its hub at Frankfurt which was the main challenger to Schiphol. Frankfurt was the most well-connected airport on the continent, even exceeds London Heathrow in terms of both European and global destinations.

4.5 Domestic services in Sweden

4.5.1 Purchase of Transwede

The ailing Transwede was by 1995 in financial difficulties and hired Jan Carlzon as new chairman. He quickly split the company into a scheduled and a charter airline, subsequently selling off the latter. Next he turned to Braathens SAFE and was soon able to make a deal with the Norwegians. Announced on 25 June 1996, Braathens SAFE agreed to purchase half of the Swedish carrier. The deal was effective from 1 September, at which time Transwede's network was integrated with Braathens'. At the time Transwede operated a fleet of seven 107-passenger Fokker 100s on a network to five destinations out of Stockholm Arlanda Airport—to Luleå, Umeå, Sundsvall, Jönköping and Halmstad. The remaining shares were bought on 18 December 1997 for two Swedish kronor and 13 million in assumed debt.

Upon the acquisition, Braathens was left two two disconnected networks. This was solved through the established of a route from Fornebu to Arlanda, which commenced on 6 November 1996. This made up one of the three legs of SAS' lucrative capital triangle. Even though Braathens SAFE was mostly concerned with connecting its two disjointed networks, most of the traffic on the route wass point-to-point. Braathens was unable to capture more than 14 percent of the market share, ²⁴² and the route became a major drain of resources for Braathens. With up to 19 daily SAS services, Braathens had a major drawback with only five to seven. While SAS was able to draw equally on Swedish and Norwegian customers, Braathens was after two years basically only able to sell tickets to Norwegians. Especially the attractiveness of EuroBonus was a hindrance. ²⁴³

A new service was opened to Östersund in 1997. Throughout 1998 Braathens continued to lose money on their Swedish operations. Competition was fierce with SAS, and Braathens saw a decline

²³⁸ Flight International (5 July 1995)

²³⁹ Guhnfeldt (27 June 1996)

²⁴⁰ *BU-stikka* (1996-04): 6 "Satser på Sverige"

²⁴¹ Tuv (1997)

²⁴² Schiefloe (1997)

²⁴³ Dahl (19 August 1998)

in both yield and cabin load. Services from Arlanda to Östersund and Sundsvall were terminated in July 1998.²⁴⁴ For the group as a whole, Braathens flew five times as many domestic passengers in Norway than in Sweden.²⁴⁵

4.5.2 Purchase of Malmö Aviation

A shift of focus came in August 1998, when Braathens strengthened its position in the Swedish market through the purchase of Malmö Aviation for about 600 million Swedish kronor. Malmö Aviation had a similar market share as Transwede, giving Braathens' a combined 21-percent share of domestic traffic in Sweden. Malmö Aviation had a strong focus on domestic point-to-point operations. From 1 February 1999 the Swedish operations were merged into a new company, Braathens Malmö Aviation, which also became its brand name used in the Swedish market. Malmö Aviation, which also became its brand name used in the Swedish market.

When Stockholm opened its new main airport at Arlanda in 1962, it never closed down the city-center airport at Bromma. Linjeflyg continued to operate its domestic flights out of Bromma until 1983. This had created an irritation for the travelers who had to change airport to connect between domestic and international flights. Linjeflyg appreciated the arrangement, as they were much closer to the city center and were in a better position to compete against the train on shorter domestic services. In the end it was a political decision to move Linjeflyg's operations to Arlanda, after which noise and runway restrictions were enforced at Bromma. Unlike Fornebu, Bromma was never closed.

Malmö Aviation exploited this opportunity and established point-to-point services out of Bromma to Gothenburg and Malmö. It procured a fleet of what would grow to ten quiet British Aerospace 146-200 regional jets. This gave them a strong market position aimed at the business segment, who appreciated Bromma's proximity for trips between Sweden's three largest cities.²⁴⁹

Malmö Aviation also targeted the London traffic from the three cities. Their aircraft were similarly suited to use London City Airport. The routes from Stockholm and Gothenburg were not able to compete with SAS and British Airways and were terminated later in 1998. However, the airline continued to operate profitably out of Malmö. By the end of the year Malmö Aviation was thereby only operating three routes: Stockholm–Gothenburg, Stockholm–Malmö and London–Malmö.²⁵⁰

²⁴⁴ Braathnes (1999a): 11

²⁴⁵ Braathens (1998): 32

²⁴⁶ Braathens (1999a): 11

²⁴⁷ Braathens (1999a): 43

²⁴⁸ Sanz (2006): 77; 194-195

²⁴⁹ Braathnes (1999a): 11

²⁵⁰ Braathens (1999a): 11

Another substantial competitive force—one not found in Norway—was high-speed trains. Malmö Aviation's strength was emphasizing its point-to-point mentality, with ease of access at Bromma, and could thereby tap into a significant amount of business revenue. These routes would be the only that Braathens could generate a profit from in Sweden.

The main challenge with Malmö Aviation was that it offered no commonalities with the rest of Braathens' network. Most obvious was the lack of transfer caused by operating out of two different Stockholm airports. This hindered Braathens from selling two-legged flights for passengers transitioning between Luleå to Gothenburg, something SAS was fully able to accommodate at Arlanda. The two airlines also had no fleet commonalities, and they were not able to simplify operations. They were ultimately never legally merged and remained two operating airlines with a common owner. Braathens co-branded the new company as Braathens Malmö Aviation, but never abandoned the Malmö sub-brand entirely.

4.5.3 Termination of Arlanda operations

Except for the three point-to-point routes, Braathens was unable to cover its operational costs in Sweden. Network effects never arose and thus failed to give rise to economies of scale. This was aggravated by Braathens' low market share.

After having lost about 600 million kroner on the former Transwede operations,²⁵¹ Braathens decided to terminate all services out of Arlanda, including the shuttle between Oslo and Stockholm. The Swedish subsidiary was then left with three services out of Bromma, to Gothenburg, Malmö and a new route to Halmstad, after terminating the routes to London.²⁵²

The venture into Sweden proved to be a disaster for Braathens and did nothing but aggravate their losses. Braathens seems desperate in their Swedish foray, buying any airline to get a foot-hold in the market. They met the same challenges in Sweden as in Norway. They were unable to operate significantly cheaper than SAS and unable to fill their aircraft. This was made worse by their low market share.

4.6 Best and Back

4.6.1 SAFE – the Norwegian flag carrier

Braathens SAFE and SAS traditionally had few surfaces of competition. The two airlines had an extensive cooperation, which included such issues as coordinating schedules to allow for easy transfer. Interlining allowed passengers to buy tickets with combined itineraries with both airlines.

²⁵¹ Tuv (10 November 1999)

²⁵² Braathens (2000a): 11; Hansson (9 November 1999)

Travelers would often fly with both airlines. Thus airport service, on-board service and regularity became important brand issues. Perhaps the area where the airlines came the closest to competition was in the political process leading up to new concessions, in which both airlines would lobby and leverage public support for their requests.

Each of the two airlines had a regional stronghold. The three Møre og Romsdal towns of Ålesund, Molde and Kristiansund were solely served by Braathens. They also dominated in Kristiansand, Trondheim and Stavanger. To those places, SAS only had a limited number of flights each day which connected onwards internationally or, in Trondheim's case, to Northern Norway. Conversely, SAS held the important Oslo services out of Bergen, Haugesund and all airports in Northern Norway. In these places, Braathens was no more than regional carrier connecting coastal cities.

Both airlines had strong and distinct brands and profiles. SAS carried out a major corporate rebranding in the early 1980s, aiming at a more customer orientation. In particular, the airline put in a large effort in attracting frequent business travelers. The focus led to SAS being increasingly regarded as a business airline. In Norway SAS had a weakness in that it was seen as more Swedish and Danish than Norwegian. The consortium had its head office near Stockholm and its main hub at Copenhagen, leaving no major function in Norway.

Braathens capitalized on this discrepancy by using a red, white and blue color scheme, painting the Norwegian flag on their aircrafts' tails and using the slogan "the Norwegian flag carrier". This was irony, as it was surely not the flag carrier in the legal sense, only in the literal sense. Braathens had a generally more egalitarian feel than SAS, emphasizing itself as the people's airline. Unlike SAS' international flights, Braathens had no first or business class seating and prided itself with treating all customers alike. For instance, during the early 1990s it produced promotional material with "Braathens SAFE has only have one class: 1st class". This and other material emphasized both the egalitarianism and the high service level at Braathens.

There was also a political divide between the two airlines. SAS was the brainchild of the post-war social democratic parties, who had partially nationalized the airline. It was one of few successful pan-Scandinavian projects. SAS was thus largely favored by the Labor Party. Braathens SAFE was a family-owned company established by a self-made entrepreneur. A dream case for the right, Braathens was largely favored by the Conservative Party and other centrist parties.

²⁵³ Original text in Norwegian: "Braathens SAFE har bare én klasse: 1. klasse". (NLM/As-1003/06/X – L0002 Folder: "5 Trykksaker – reklamemateriell").

Åsheim found that although the two airlines were publicly regarded as politicized, this was not reflected in the political views among the employees.²⁵⁴ The branding of the two airlines was in many ways opposed to their ownership and political profile, with the "left" SAS having a strong business and more elitist profile, while the "center-right" Braathens came with an egalitarian flavor.

4.6.2 A new service paradigm

Braathens launched a new corporate profile on 29 March 1998.²⁵⁵ A central aspect of the corporate re-branding was the desire to adopt Braathens as the brand also in the Swedish marked, replacing Transwede. Subsequently, the new profile removed the strong emphasis on the Norwegian colors. Instead, light blue became the main color element. The "SAFE"-suffix was dropped from the name, and instead new logo with a stylized silver wing was used, replacing the flag of Norway.²⁵⁶

On board, the aircraft was split into two sections—Best and Back. Best was a somewhat upgraded product compared to the previous standardized class. The seat pitch (distance between seats) was marginally increased. Lounges were established a key airports and complimentary warm meals were served on flights to Northern Norway. A curtain was hung up in the cabin, behind which Back customers were placed. These customers received a smaller seat pitch and no complimentary frills. However, Back tickets were sold with a significant discount. Braathens instructed its employees to whenever possible provide a differing level of service to the two classes of passengers. Back customers would specifically receive longer waiting times when calling the booking office, at the ticket desks, during check-in and at the gate. They were also forced to manually check in, even if they had no check-in baggage, while Best customers could walk straight to the gate.

The idea behind Best and Back was to allow for a product differentiation, rather than focus on price discrimination. Braathens in many ways took the same steps as SAS had during the 1980s, attempting to create a superior business-traveler class (as opposed to a business class) and a cheaper tourist class. It could be described as an attempt at a "sandwich", in which Braathens intended to provide a superior premier service level and at the same time offer the cheapest possible no-frills tickets.

²⁵⁴ Åsheim (2004): 67

²⁵⁵ NLM/As-1003/06/L0007 Memo: "Oversikt over aktiviteter 29. Mars [*sic*] – lansering Best og Back". (undated, 1998)

²⁵⁶ NLM/As-1003/06/L0007 Pamphlet: "Norge har fått et nytt flyskelskap som skal ta opp kampen med de store." (undated, 1998)

²⁵⁷ Ibid.

²⁵⁸ NLM/As-1003/06/L0007 Slide series: "Nyhet: To helt nye flytilbud" (undated, 1998)

4.6.3 Customer reactions

The strategy was met with resistance and complaints amongst many passengers. Employees reported that the number of complaints rose sharply after introducing Best and Back.²⁵⁹ In part the complaints were a response to the chaotic situation which ensued with the more complicated customer-handling procedures. More deep-felt and long-lasting were the complaints which were tied to the shift away from Braathens traditional egalitarian attitude. Up until this point, Braathens had never operated with seating classes or any differentiation of customers. Best and Back turned the perception of the people's airline upside down, suddenly making SAS seeming to be the egalitarian operator.

Some of the outcry which made it to the newspapers focused on passengers feeling that Braathens was dividing them into first- and second-rate citizens. An example was union leader Bjørn Willumsen from Tromsø, who commented that "this class divide is a non-Norwegian invention" and encouraged passengers to boycott Braathens. He stated that he was willing to accept the cheaper tickets and lower service, but could not allow the airline to hang up a curtain to separate the classes. Other passengers complained about having to pay full price and yet received Back service on popular flights. The issue went so far as a few Back passengers demonstrating by sitting in the Best section. Other passengers wrote letters to newspapers endorsing the changes. Best passengers reported that they were satisfied with the improved service. Some Back passengers were happy, glad to receive cheaper fares. One customer stated they were able to fly instead of taking the train due to the lower fares.

It is difficult to accurately assess the public perception of Best and Back. There were many customers who undoubtedly disliked the idea, while other embraced it. Although somewhat anecdotal, my personal experience while writing this thesis has shed a certain light the issue. When the topic of the thesis has been presented to friends and and acquaintances, most of those who were old enough to remember have immediately brought up the topic of Best and Back. Nearly all of these have, with varying degrees or respect, ridiculed the Back policy. They have then often asked about or indicated their belief that it caused or at least contributed to the airline's demise. From this is can be concluded that the Best and Back policy was at least successful in creating public awareness and has crept into the public conscience.

²⁵⁹ BU-stikka (1998-03): 2 "Aldri har vi fått så mye kjeft – og aldri før har vi hatt så mange passasjerer!"

²⁶⁰ Original in Norwegian: "Dette klasseskillet er en unorsk oppfinnelse" (Rapp 17 April 1998)

²⁶¹ Rapp (17 April 1998)

²⁶² Tårnås (18 April 1998)

²⁶³ Rapp (7 June 1998)

²⁶⁴ Verdens Gang (30 April 1998)

²⁶⁵ Verdens Gang (20 April 1998)

4.6.4 Operational consequences

A key problem with the new policy was that it increased operational complexity and thus costs, especially increasing the crucial turnaround time at the gates. During check-in and boarding, customers had to line up in two queues. Failures with the machines soon forced all customers into a single line-up, and the problems with these machines continued for years. On board, the crew had to reconfigure the cabin depending on the number of Best and Back tickets sold on each flight. Customer service times increased as employees had to deal with a steady stream of complaints at ticket sales, check-in, boarding and in the cabin.

Frills, such as complimentary meals, are often cited as a key difference between "high" and "low"-service airlines. However, they account for meager costs. The largest costs for airlines are wages, fuel, aircraft purchase or leasing, and maintenance. Best and Back did not aid in reducing unit costs, as it prolonged turn-around times and added complexity to ground handling services. Turn-around times had previously been a competitive advantage for Braathens, as they had been able to achieve this faster than SAS, and they at least partially lost this advantage with the class divide.

The entire Best and Back affair tended to strengthen SAS. The competitor also launched similar low-fare tickets to Back. While these had restrictions in terms of cancellation and time of purchase, SAS continued to offer a frilled single-class service on board domestic flights. Perhaps more than anything, the launch of Back made the public more aware of the existence of low-priced tickets, and especially encouraged business customers to switch to these. With SAS matching the service level of Best for their discounted tickets, they were able to capitalize off of Braathens new strategy.

Despite its seemingly lack of policy and injury to Braathens' image, it seems to have had little influence on on ridership. There is no indication in the statistics or other sources that Braathens saw any dramatic decrease in patronage following the introduction of Best and Back. Two possible explanations are that the most important customers, the business travelers, were happy to receive the Best upgrade, while leisure travelers were

It is quite conceivable that Best and Back worked in the extent that it made flying with Braathens more attractive price-wise, while at the same making people less favorable to Braathens. This may seem like an oxymoron, but this was a period when leisure travelers were becoming less loyal in order to take advantage of an increasing number of cheap tickets.

4.6.5 Return of the flag

Braathens gave up on the Best and Back model in Sweden in February 1999, but retained it in Norway. ²⁶⁶ This created an even more fragmented operational situation, with differing products in Norway and Sweden. The policy was kept until 28 October 2001, when the airline returned to a single-class, all-inclusive frills service. ²⁶⁷

Also the change of the corporate brand was not popular. Introduced to create a unified profile across borders, the lack of a flag broke down the Norweigan-ness of the airline. This eventually caused Braathens to backtrack on the logo after the Arlanda services were terminated. Braathens therefore re-iterated their new brand in 1999. The new font and general color scheme were retained, as was the abandonment of "SAFE". However, Braathens returned to the phrase "The Norwegian Flag Carrier" within its Norwegian segment and replaced its silver wing with the flag of Norway.²⁶⁸ Malmö Aviation was made more distinct and retained its logo, a crowned lion.

4.7 Gardermoen and the price war

4.7.1 More flights and lower prices

Oslo Airport, Gardermoen opened on 8 October 1998, the same day as Fornebu was shut down.²⁶⁹ With a second runway, the morning capacity limitation was removed and the airlines were finally able to compete freely without restricting the number of morning arrivals and departures. As noted in chapter 3, the low-cost entrant Color Air started flights on routes to Bergen, Ålesund and Trondheim.²⁷⁰ Meanwhile the seat taxes had been introduced.²⁷¹

Braathens chose to take up competition with SAS to Haugesund, the sole remaining Southern Norway destination without a Braathens service. On the other hand, it was forced into increased competition on some of the routes it had been able to hog, to Ålesund and Kristiansand.²⁷² Domestically, only Røros, Molde and Kristiansund were retained as monopoly-routes for Braathens out of Oslo. On its side, SAS retained a monopoly on its Finnmark services, to Alta, Lakselv and Kirkenes, as well as to Bardufoss.

Perhaps more critical was the increase of capacity on the routes which were already flown by both airlines. The realignment of routes in 1994 allowed the airlines to add capacity on what they

266 Eliassen (13 February 1999)

267 Gustad (2001)

268 Braathens (2000a): 6

269 Move 1998-07: 2-3

270 Lillesund (5 August 1998)

271 Norwegian Tax Administration (2016): 68–69

272 Sætre (12 March 1998)

regarded as the most lucrative routes. With deregulation in place, both SAS and Braathens hoped to capture even larger quantity of business travelers through increasing the number of flights, especially during the morning and afternoon rush periods. Ålesund saw the greatest rise, from seven to seventeen weekday round trips. Both Braathens and SAS increased the number of services on all their head-on routes (Stavanger, Bergen, Trondheim, Bodø, Harstad/Narvik and Tromsø), except Longyearbyen. In total, the three airlines increased the number of domestic Oslo weekday departures from 138 to 200, and increased the seat capacity on the flights from 18,000 to 26,000.²⁷³

The challenge for the airlines was that the increase in capacity was not met with a corresponding increase in demand. Although there was a five-percent increase out of Gardermoen for its first year, this was no more than the typical annual increase in passenger traffic which occurs annually. An underlying cause was the decline in the oil price, which tied in with a reduction in activity and thus travel in the petroleum industry. The industry stood for a substantial amount of air traffic demand in Norway.²⁷⁴ The increased number of flights without a corresponding increase in patronage led to a noticeable decline in load factor. The effect was particularly dramatic on the routes to Kristiansand and Ålesund; the latter had only a 29-percent load factor.²⁷⁵

4.7.2 Consequences of more flights

In its fourth-quarter figures from 1998, costs for Braathens had increased by 40.6 percent from the last quarter of 1997, while income had only increased by 17.6 percent.²⁷⁶ These dramatic figures were tied directly to the airline's inability to match new passengers to the added number of flights.

Dagens Næringsliv analyzed the ticket prices and revenue streams for the airlines for the first quarter of 1999. They estimated that the three airlines had a combined operational loss of 610 million kroner in the domestic market in Norway. It found that Braathens had traffic revenue of 665 kroner per passenger, compared to 540 for Color Air. No figures were available for SAS. Despite promoting itself as a low-cost carrier, Color Air had operational costs per passenger of 1,400. This was aggravated by is load factor of 36 percent, compared to 47 and 48 percent for Braathens and SAS. The newspaper concluded that at the given level of production, ticket prices would need to increase by fifty percent for the airlines to cover their domestic operating costs.²⁷⁷

Unable to meet face to face due to antitrust regulations, SAS attempted to use the press to collude with Braathens. Gunnar Reiten of SAS indicated in *Bergens Tidende* that capacity had to be reduced

²⁷³ Sætre (12 March 1998)

²⁷⁴ Valderhaug (2 September 1999)

²⁷⁵ Enghaug (1998)

²⁷⁶ Braathens (1999b)

²⁷⁷ Erikstad & Wangsmo (22 May 1999)

for mutual benefit. He used the Oslo–Bergen route as an example, where SAS flew eighteen daily round trips, Braathens flew fourteen and Color Air flew five. With a combined 2.5 million seats, in combination they had about fifty percent load factor.²⁷⁸ Frode Geitvik of Braathens responded that they were not willing to cut capacity unless SAS committed first.²⁷⁹ This showed the conundrum the two airlines were in, in which frequency was so important that both were willing to continue to lose money to show their customers they were committed to flying often.

With no improvement in sight, Color Air terminated its operations on 27 September 1999.²⁸⁰ Two weeks later Braathens announced an increase in ticket prices, but only on routes which were not subject to competition.²⁸¹

4.7.3 Large customers

A central customer group for the airlines were large customers. Braathens SAFE defined these in 1995 as those companies and organizations who flew for more than 5 million kroner per year. These companies were offered special deals, in which they received large discounts if they were loyal to a single airline. By 1995 a many larger companies had signed such agreements, committing them to one of the airlines. That year Braathens SAFE stated that they had about forty such customers. The discount rates were never made public, but were substantial. Braathens SAFE was initially able to capture several of the largest corporations, such as Aker, Statoil and the Norwegian Confederation of Sports.²⁸²

After Gardermoen opened, the two largest airlines became more desperate to capture the large customer agreements. This gave the customers a stronger negotiating position and helped secure them larger discounts with the airlines. This again reduced the airlines' revenue, aggravating their predicament. Not only that, but the large customers were a major press group to keep frequencies high, often willing to sacrifice some discounts if the airline could promise additional flights.²⁸³

With the high discount rates and strong pressure to keep up frequencies, it is rather questionable if the agreements were of much benefit for Braathens. Although the agreements generated volume, they offered low yield and pressed up structural costs.

While Braathens was at a disadvantage against SAS, the Wings program was helpful in the competition with Color Air. The new entrant deliberately chose to avoid a frequent-flyer program,

²⁷⁸ Valderhaug (2 September 1999)

²⁷⁹ Valderhaug (7 September 1999)

²⁸⁰ Steen (28 September 1999)

²⁸¹ Dahl (16 October 1999)

²⁸² Valderhaug (24 February 1995)

²⁸³ Dahl (21 September 1999); Stenseng (19 April 1999)

deeming it a costly frill. Color Air was successful at claiming some business travelers, but these were the most price-sensitive, and they were never able to make a sizable dent into the segment willing to pay full fares. Their low frequency made them unattractive for the large customer agreements.

4.7.4 Financial consequences for the airlines

When looking at the passenger and financial statistics for Braathens and SAS,²⁸⁴ one avenue to insight is to compare 1997, the last full year with Fornebu, with 1999, the first full year with Gardermoen, looking at domestic services only. A caveat is that Color Air only operated for half of 1999. Braathens increased its available seat kilometer (ASK) by 23 percent, while revenue passenger kilometers (RPK) only increased by 10 percent. This is below average growth rate in patronage for Braathens in preceding years. Similarly, SAS increased their ASK by 24 percent and only achieved a 7-percent growth in RPK. Both airlines subsequently saw a drop in their cabin load —most dramatically for SAS who fell from 61 to 53 percent—compared to Braathens' decline from 57 to 52 percent. Braathens thus ended up increasing their operating costs per ASK from 0.79 to 0.91 kroner, or 28 percent. At the same time their yield (revenue per RPK) fell from 1.71 to 1.55 kroner, or 10 percent.

Every number went the wrong way for Braathens. They increased the number of flights and hence seats available. Although they sold a little more tickets, their costs increased more than their income. This took place during a downturn in business demand, and the result was foreseeable. While Braathens made a net profit of 214 million kroner in 1997, it lost 612 million in 1999, including the losses made in Sweden.

Aggregate numbers are not directly available due the consolidation of financial reporting. *Travel News* estimated that between them the airlines lost somewhere around 2.5 billion kroner for the period from Gardermoen opened to Color Air terminated operations. It estimated that both Braathens and SAS lost about one billion kroner each on the domestic Norwegian market, while Color Air lost somewhere between 400 and 500 million kroner.²⁸⁵

As the losses mounted, Braathens was forced to sell off assets and lease these back. By 2000 the airline had sold all but six aircraft and were instead leasing the other 36 back. This contributed to reduce the company's debt, but was also eroding away its equity, as the cash flow from the sales in

²⁸⁴ The statistics are tabularized and referenced in appendix B.

²⁸⁵ Norwegian News Agency (1 February 2000)

part was going to cover operational losses.²⁸⁶ In comparison, in 1995 the airline owned twenty aircraft and only leased eight.²⁸⁷

The same year, the SAS Group went with a profit before taxes of 1,846 million Swedish kroner. Braathens was bleeding and SAS was doing fine. This placed Braathens in a predicament. If they continued the aggressive stance, they would continue to lose money. Only if the airline could somehow cut costs would it be possible to salvage the airline. SAS, on the other hand, had sufficient profits from its other operations that it could continue the financial bloodshed in Norway, well aware that it had the financial muscles to persevere. To make the matter worse for Braathens, SAS had many lucrative routes with limited or no competition, not least the capital triangle, while Braathens had to fight head-on against SAS on all its routes which gave all but negligible revenue.

4.7.5 Improve 800

The immediate response to the declining results was to focus on increasing revenue, and particularly on selling more tickets.²⁸⁹ The next step was the plan Improve 800, introduced in March 1999, which had as its eponymous goal to improve the result by 800 million kroner over three years. On the one had it focused on punctuality in order to become more attractive to passengers. It also aimed at reducing the cost per available seat kilometer (ASK), from its concurrent estimate of 0.93 øre per ASK to 0.87. It also aimed at increasing passengers per man-year, from 1,335 to 1,600.²⁹⁰ Meanwhile Erik G. Braathens took leave as CEO and was replaced by Arne A. Jensen.²⁹¹

One of the main components of this plan was to place most new hirings on hold.²⁹² In sum, it consisted of a catalog of smaller issues which each could save smaller amounts.²⁹³ But as was clearly stated in the plan, the core of the losses, the high frequency, was not part of the arrangement. Management argued that doing this would make it impossible to capture the lucrative business customers.²⁹⁴ The program was regarded as successful by top management in that understanding was able to cut costs.²⁹⁵ By 2000 the operating costs per ASK had actually increased, to 0.94 øre, but the airline had also been able to improve its yield.²⁹⁶

²⁸⁶ Braathens (2001): 12

²⁸⁷ Braathens (1996): 21

²⁸⁸ Scandinavian Airlines System (2000): 72

²⁸⁹ Move (1991-02): 4–5 "Nå må vi selge mer".

²⁹⁰ Move (1999-03): 2 "Improve 800"

²⁹¹ Move (1999-06): 3 "Jensen reorganiserer"

²⁹² *Move* (1999-03): 5 "Restriksjoner på nyansettelser"

²⁹³ Move (1999-04): 3 "Tiltakene"

²⁹⁴ Move (1999-04): 2 "Hvorfor ikke legge ned ulønnsomme ruter?"

²⁹⁵ *Move* (1999-06): 1 "Improve 800 fungerer"

²⁹⁶ Braathens (2001): 39

As other times, Braathens was not able to tackle the heart of its problem. Improve 800 was not more than a minor program and had no bearing on the company's main course. If *Dagens Næringsliv* was correct in asserting that the airline needed a revenue hike of fifty percent to sustain its operations, a program which could save five percent of the costs will help little. And even if higher revenues and lower costs where achievable, the very mindset of operating too many flights remained. Once a higher ridership was established, nothing hindered Braathens or SAS from again increasing the number of flights after pressure from their largest customers.

4.8 Take-over

Braathens, its majority owners Braganza, Bramora and KLM, and SAS signed an agreement on 21 May 2001 whereby the latter agreed to buy all shares in Braathens for 35 kroner per share. Braathens' Swedish division would be sold off. The deal, which valued Braathens at 1.1 billion kroner, required ninety percent of the shareholders to accept the deal and approval from the competition authorities.²⁹⁷ The friendly take-over was largely met by disbelief in the public and amongst Braathens employees, but the remaining shareholders saw it as a blessing and could not sell their shares fast enough.

The main obstacle for the merger was the Norwegian Competition Authority, who would be required to stop the merger unless could regard Braathens as a failed firm (*fallittbedrift*). Such an assessment not only required Braathens to be insolvent, and thus be one step away from bankruptcy, but also that there were no other purchasers who would be better suited than SAS, and that a take-over would serve the market better than bankruptcy. In their initial verdict on 20 August, the authority stopped the merger, stating that only having a single primary airline would stifle competition and create a monopoly.²⁹⁸

The Competition Authority reversed its decision on 23 October. That time it argued that Braathens had reduced its equity to 559 million kroner and found it unlikely that all assets could be liquidated at their book value. It also found that it was highly unlikely that any other airline than SAS would be willing to buy Braathens.²⁹⁹ Lawyer Thomas Sando noted in 2015 that the SAS purchase of Braathens was the only time the Competition Authority had approved a merger on the basis of the failed firm clause, although Coop's take-over of Ica later that year became the second case.³⁰⁰

²⁹⁷ NLM/As-1003/06/R Regnskap/L0001 Document: "Informasjon til aksjonærene i Braathens ASA" Dated 21 May 2001.

²⁹⁸ Sando (2015)

²⁹⁹ Norwegian Competition Authority (2001)

³⁰⁰ Sando (2015)

With the authority's blessing, the two former competitors started coordinating their operations. Taking effect on 2 April 2002, the two airlines split the domestic market between them, with only a handful or routes flown by both. Overcapacity was reduced, with sixteen 737s retired from domestic service.³⁰¹

A full-out merger took place on 1 May 2004, creating SAS Braathens. The new airline took over the operating license from Braathens and operated a fleet of fifty aircraft.³⁰² This arrangement lasted until 1 June 2007, when the airline was re-branded and reverted back to a conventional SAS branding.³⁰³

4.9 Conclusion

Braathens SAFE underwent a number of corporate and operational changes during the 1980s and 1990s, including floating on the stock exchange. Early competition from 1994 was rather undramatic, although Braathens opened new routes from Oslo to Northern Norway. They was an early adopter of frequent-flyer programs, and at first partnered with British Airways. This was changed in 1997, when a partnership and ownership deal was made with KLM. However, Braathens was not able to build a strong international network out of Oslo and ended up with an inferior position compared to SAS. This was aggravated by frequent-flyer programs tendency to let the winner take it all.

The foray into Sweden was futile, not least because it added organizational complexity without giving network effects or significant economy of scale. Transwede never made any profits, and its operations were never well integrated into the network of Malmö Aviation or the Norwegian operations. The opening of Gardermoen resulted in a price- and frequency war which increased Braathens costs without a corresponding increase in patronage or revenue. Color Air and the seat tax did not help the situation. Most controversial was the two-class arrangement Best and Back. It insulted many customers increased operating costs, but did not have much effect on sales. SAS was ultimately allowed to buy Braathens in 2001 after the Competition Authority had deemed it a failed firm.

³⁰¹ Larsen (1 February 2002)

³⁰² Scandinavian Airlines System (2005): 37

³⁰³ Scandinavian Airlines System (2008): 31

5 Causes of the decline

5.1 Introduction

This chapter looks is primarily aiming to tie together many of the issues which have been presented in the previous three chapters. In particular, it will place at its center the questions which were raised in the introduction regarding the underlying causes of Braathens demise and answer these.

It will first present Braathens' fleet management, an issue which has some consequences for the later analysis. It then investigates Braathens inability to capture customers through its various moves throughout deregulation. In particular the issues of the lack of a proper international network, challenges with creating customer loyalty and the pitfall of frequency will be discussed. This leads to the inevitable question as to the possibility of having converted into a low-cost carrier.

Also the concern of government discrimination will be addressed as a participatory cause, before international influences on Braathens behavior is look at. The chapter concludes with an epilogue which looks at the consequences of the take-over, both in terms of government policy to airlines, and in terms of a heritage legacy.

5.2 Fleet management

5.2.1 Fleet age

Fleet planning is one of the most important decisions made by an airline. The choice of aircraft influence costs and which routes can be operated. Due to the longevity of airplanes, the consequences can last for decades. Aircraft operation costs are effected by a number of variables. Newer aircraft burn less fuel and have simpler maintenance procedures, but incur higher capital expenditure. There are significant commonalities between aircraft of the same type, so airlines can cut costs by limiting the number of aircraft types they have. This is mostly due to simplified aircraft allocation processes, less training of pilots and technicians, and reduced fewer spare part inventory.

Braathens consolidated their fleet in 1986, selling their two intercontinental Boeing 767s and six smaller Fokker F-28s. This left them with seventeen 120-seat Boeing 737-200s.³⁰⁴ This move created a *unified fleet*, in which all aircraft were of the same type and size, a cost-saving mechanism favored by low-cost carriers.

³⁰⁴ NLM/As-1003/06/Braathen SAFE arkivmateriale Document: "Braathens SAFE går inn for enhetsflåte av Boeing 737"

However, Braathens were left with a rather aging fleet, particularly following the recent announcement by Boeing for an upgraded version of the 737, retrospectively known as the Classic series. This consisted of three sizes (-500, -300 and -400 in increasing size) equipped with the next generation of CFM-56 turbofan engines, which reduced fuel burn, maintenance costs and noise pollution. Braathens therefore quickly turned around and decided to order twenty-five of the new aircraft, placing the order on 21 May 1987. The order was for eighteen 124-seat -500s and seven 156-seat -400s. The contract saw the airline replace its entire fleet between 1989 and 1994, at a cost of 4.5 billion kroner. Braathens therefore quickly turned around and decided to order twenty-five of the new aircraft, placing the order on 21 May 1987. The order was for eighteen 124-seat -500s and seven

An order for additional aircraft was placed in early 1997, when the airline ordered six new 134-seat Boeing 737-700, with an option to buy up to ten more. Branded as Next Generation, they offered nine percent reduced fuel burn and simpler maintenance.³⁰⁷ Nine such aircraft were delivered between 1998 and 2000.³⁰⁸ Already at this point the unified fleet policy fell flat, as the new aircraft required a different pilot type rating.

The complexity increased further as Braathens entered the Swedish market. Upon purchase, Transwede operated a fleet of seven Fokker 100s,³⁰⁹ while Malmö Aviation operated a fleet of eleven British Aerospace BAe-146.³¹⁰ Braathens bought two Boeing 737-300s and placed them into service with Transwede in 1997. The idea was to gradually replace the Fokkers with the slightly larger 737s, but this never came to be.³¹¹ Thus Braathens ended up with three types of aircraft in Sweden and four all together. The Fokker 100s were not retired until the termination of the former Transwede routes, while the BAe-146s remained in use until Malmö Aviation was ultimately spun off.

SAS, in contrast, entered the 1990s with a plethora of aircraft types. SAS had a more intertwined fleet strategy, and never chose to "clean up" its fleet like Braathens did in 1986 and then again with the 737 Classics. This reflects a wider distinction between larger flag carriers, who often ended up with unwieldy fleets, and the more lean approach which smaller airlines took. In contrast, SAS had a more complex and prolonged fleet strategy. SAS kept up to three generations of aircraft operating simultaneously, caused in part by a more fragmented procurement plan and the take-over of

305 Hill (2002): 101

306 NLM/As-1003/06/L0007 Document: "25 nye fly – 15 kroner på hver hundrelapp"

307 BU-stikka 1997-01: 12–13

308 Braathens (2000a): 13

309 BU-stikka (1996-04): 6 "Satser på Sverige"

310 Flight International (26 August 1998)

311 Braathens (1998a): 11

Linjeflyg. At its peak in 1998 SAS operated six families of aircraft in a combined ten sizes of medium-sized jets.³¹²

Operationally this gave Braathens an edge. The simpler fleet with modern engines meant lower operating, fuel and maintenance costs, granting Braathens lower unit costs than SAS. Braathens could also rightly market their fleet as "greener" than their competitor. Perhaps most important for travelers was the significantly reduced cabin noise. The downside for Braathens was the enormous capital expenditure. Although they were able to liquidate their older aircraft, they were far from covering the cost of the new ones, forcing Braathens to finance the aircraft through a combination of loans and leasing. This meant that Braathens increased its fixed capital costs related to owning aircraft while reducing the unit costs related to operating a given route.

5.2.2 Size of aircraft

So-called medium-sized jets remain the most popular size category for airlines operating on short-to medium hauls. This market is entirely dominated by the Airbus A320-family³¹³ and the Boeing 737. McDonnell Douglas was until 1997 a major player with their MD-80s and MD-90s³¹⁴—used by among others SAS. Medium-sized jets come in various lengths, and range in seating from about 120 to 200. In more recent years the Airbus A320 and the 737-800, both seating about 180, have become extremely popular and have increasingly dominated sales. The smallest models, the A318, the 737-500 and the 737-600, which all seat about 120, have hardly sold at all.³¹⁵

When Braathens ordered its new aircraft in 1987, it decided to make up the bulk of its fleet of the 737-500, the smallest size and comparable in size with their former unified fleet. Braathens opted for the smallest model as it did not see the need for larger aircraft. This size category was not particularly popular globally, with most airlines opting for the larger -300 and -400 models. The -500 became popular in Scandinavia, with Maersk Air ordering some and Linjeflyg ordering twelve aircraft in 1991. Thus this model ended up with SAS, who quickly sold the aircraft. Throughout the 1990s the -500s faded from popularity, with the exception of in the Eastern Europe and the

³¹² Even when SAS' intercontinental and regional fleet is ignored, it entered the 1990s with a mix of DC-9s and MD-80s, both in two sizes, joined in 1996 by just eight MD-90s. SAS also inherited two sizes of Fokker F-28 and 737-500s from Linjeflyg, and then opted to purchase three sizes of 737 Next Generation starting in 1998. The latter allowed them to retire the DC-9s, F-28s and -500s. (Hall 2002: 115–212)

³¹³ The Airbus A320-family consists of four models, from smallest to largest, A318, A319, A320 and A321. 314 Hill (2002): 156

³¹⁵ As of September 2016, Boeing had manufactured 5,015 aircraft in the -800 series, compared to 69 of the -600 series, with SAS as the largest customer. The -500 fared much better at 389 manufactured units, although also this was dwarfed by the 1,113 -300s and 486 -400s. (Boeing 2016) The same ratio holds for Airbus, who had manufactured 4,687 A320s and 80 A318s. (Airbus 2016) Although the A318 is used here to demonstrate the limited popularity of the size of aircraft, it entered revenue service in 2003 and was thus not an option for Braathens or SAS at the time they ordered their fleet.

³¹⁶ Hill (2002): 136

former Soviet Union, where they were popular on networks which often saw few passengers but long distances.³¹⁷

The primary challenge with the -500s, -600s and A318 is that they incur almost the same operating costs as their larger counterparts, ³¹⁸ yet are only able to carry two-thirds of the number of passengers and half the cargo.

SAS was the launch customer of the -600, and its 28 aircraft was just shy of half total production run. This gave a rather particular situation in the Scandinavian market, as both airlines operated a fleet of aircraft uncommon almost anywhere else. Most airlines who wanted to operate in the size category of about 100 seats opted for custom-built models which could provide structurally lower operating costs, such as the Fokker 100 or Boeing 717.

The fleet decisions resulted in high operating expenses per seat compared to other models. This skewed the performance of cabin load. The smaller aircraft had much higher unit costs per seat kilometer, meaning that the break-even point in terms of what cabin load would cover operating costs would be much higher.

For Braathens this was in part counterbalanced by SAS' choice to buy the similar sized -600. However, SAS also bought the larger -800, which allowed it to operate the larger aircraft on busier routes. Björnelid criticized SAS' choice of three sizes of aircraft, in particular the use of the smallest size, following the same line of though as has been outlined here.³¹⁹

5.3 Failing to capture the customers

Despite its ambitions, Braathens saw a decline in market share in the period following deregulation. Notably, it saw both a failure to retain its market share amongst business travelers, while at the same time not succeeding in gains in the leisure market.

5.3.1 The peril of frequency

Braathens hung on to a network carrier model. The reason for this, and the reason for the otherwise success of the network carrier model, it that network carriers are the only airlines which are able to capture the passengers with the highest willingness to pay. In extreme cases, the best-paying customers are willing to pay about an order of magnitude more than to the cheapest tickets available. These customers are extremely lucrative, but come at a cost. They demand frequent

³¹⁷ Hill (2002): 151

³¹⁸ The smaller aircraft have almost the same fuel consumption, retain two pilots, although the cabin crew can be cut from four to three, and incur essentially the same maintenance costs. Capital costs are reduced somewhat, but overall the reduction in operating costs are negligible.

³¹⁹ Björnelid (2013): 125

flights, the ability to change flight at short notice, additional space on board with complimentary superior service and lavish lounges at the airport. They embrace frequent-flyer programs, alliances and extensive networks, and often chose to consistently travel with their preferred airline.

The challenge for Braathens was not the extra costs these customers incurred through frills and other service. Instead it was a structural burden, especially that tied to frequency. Whatever airline offers the most flights on a given route will be disproportionately popular amongst the passengers. Even if one airline has only one or two flights more per day, business travelers will often opt for that airline in case their return time changes, or simply because it increases the chance of a more convenient travel time. This results in that the airline with the most flights gets a percentage of the passengers which exceeds its percentage of flights. With equal aircraft sizes, a higher load factor and hence better profitability. This gives both airlines an incentive to increase their frequency. The smaller tried to catch up with the larger, while it again wants to have just a few more flights than the opponent. In both cases, the increased frequency does not actually attract additional travelers, but simply increase the operating costs.

This situation arose on at least ten domestic routes in Norway,³²⁰ the Arlanda-based domestic services in Sweden as well as the services between Oslo to Stockholm. Braathens and SAS both lost money on all routes on which they both flew, yet were able to make money on the routes they had a monopoly on. In Braathens case, this was from Oslo to Molde and Kristiansund, as well as some direct services outside the capital.

Both airlines gave repeated statements that they had some sort of natural right to a given market share. Braathens often emphasized their right to at least half the market, while SAS publicly aimed at seventy percent. For both of them to reach their target would be a mathematical impossibility. Part of the problem for the airlines was a fixation on market shares instead of absolute passenger numbers. The total ridership from 1994 through 2001 was just shy of doubling and both airlines experienced growth in absolute numbers. Market share was a ghost left over from the regulated area, when size and prominence could trump the bottom line in decision-making. Not least were these principles important when demanding new concessions. In a regulated market, they were inn themselves of little importance.

5.3.2 Customer loyalty and international networks

Braathens kept changing their brand profile. Going from a strong egalitarian basis, their shift in 1998 made them more "SAS" than SAS. This shift was confusing for the public. Braathens

³²⁰ There was over-capacity on all Oslo-bound flights where both Braathens and SAS flew, as well as the route Bergen–Stavanger.

followed the policy that if they were to operate a route, they would operate with a high frequency, in order to make it attractive to business travelers. This made it impossible for them to try out new routes and opportunities, especially international, without a large-scale commitment. In Sweden, Braathens partially tried to build up a quasi-network operation out of Arlanda, partially built up a clear point-to-point operation out of Bromma aimed at business travelers. SAS on its hand, despite also giving its brand a face lift, was able to keep a consistent profile, emphasizing itself at a business-traveler-friendly network carrier, yet egalitarian enough to be accepted by Scandinavians. All in all, it was the inconsistency is Braathens marketing efforts which caused problems, not least forcing the company retract many of its 1998 innovations in the following years.

The central issue for Braathens was that they were becoming more similar to SAS, yet remained inferior in most aspects which were of importance to business travelers. Both SAS and Braathens attempted to create a sphere of loyal customers, who would thereby be less concerned with prices. SAS used their superior international network to bond a greater share of the business customers. It helped little that Wings was superior to EuroBonus when looking blindly at the terms.

Perhaps most detrimental issue for Braathens was that they were never able to build up an international network out of Oslo. These were limited to Stockholm, London and Amsterdam, in addition to a handful leisure destinations. Although these three routes were important, the lack of services to for instance Brussels, Paris, Copenhagen and Germany placed Braathens at a disadvantage. SAS was therefore able to stand as the most well-connected of the two. Braathens attempt at sending passengers via Amsterdam may have been attractive for longer hauls, but was uninteresting for shorter trips.

While SAS was a driving force and founding member of the first truly global alliance, Braathens was much more reactionary. SAS placed itself at the leading edge of alliance building, allowing it to utilize Lufthansa to cover its weaknesses and better connections worldwide with additional partners. Braathens paled in comparison. They never joined an alliance proper, instead becoming a junior partner within the KLM Group. Connecting through Amsterdam was good enough for many customers, but as so many other areas, Braathens ended up second-best in the class.

5.3.3 A lack of differentiation

Braathens failed to create for itself a niche market in which it stood stronger than SAS. The airline was preoccupied with competing. As in many cases, success in the market is centered around creating structures which make it difficult to compete. Sometimes this is done by mutually letting the competitor have their share or segment of the market. This gambit requires two to play with

success. Braathens and SAS were able to conduct it until 1998, but in the end it turned out that it was artificial restraints rather than tacit collusion which kept them away from the frequency pitfall.

In retrospect it can be seen how Norwegian was able to create such a differentiation up against SAS. They flew to numerous holiday destinations and are consistently underbidding SAS on ticket prices. This they can do because they have structurally lower operating costs than SAS, while SAS can get away with higher prices due to its loyalty programs. Just the issue of whether checked-in baggage should be free creates a means of differentiation. The most natural way for Braathens to take upon itself such differentiation would have been to embrace the ways of a low-cost carrier.

5.4 Classification as a low-cost carrier

5.4.1 Low-cost carriers as a heuristic

In hindsight it may be easy to criticize Braathens for not transforming into a low-cost carrier. The success of Norwegian since 2002 has largely been due to its differences from SAS, rather than an attempt at a me-too mindset. On the other hand, the rise of the low-cost carriers was not obvious during the 1990s.³²¹ This is perhaps best demonstrated by incumbent airlines buying up second carriers and establishing protections against foreign carriers. The claim was not entirely without merit, as for instance British Midland survived for almost two decades of competition as a secondary network carrier.³²² The late 1990s were the formative age of the low-cost carriers in Europe, but their break-through as major players came after the calamities of 2001.

Low-cost operations outside the established cartels was not a foreign idea for Braathens, who had actually been one of the earliest players in the low-cost scene. In cooperation with Loftleiðir Icelandic Airlines, the two set up a combined route in 1952, with Braathens flying Oslo—Reykjavík and Loftleiðir flying Reykjavík—New York. This was a convenient way of bypassing the IATA cartel prices on trans-Atlantic flights. The deal was terminated in 1960 when Loftleiðir instead started channeling its passengers into Luxembourg.³²³

Although network and low-cost carrier can be a useful heuristic for theoretical models, their become problematic when being used to describe actual airlines. The challenge is that most airlines are placed somewhere on a continuum between a pure low-cost model and a pure network model. A few airlines, such as Ryanair and Color Air, clearly classify as low-cost carriers. Such airlines are

³²¹ Sheth et. al. (2007): 99

³²² British Midland was through the 1990s partially owned by SAS and Lufthansa, and later entirely by the latter. It was a clear-cut case of a network carrier based at London Heathrow Airport and a member of the Star Alliance. It was ultimately bought by British Airway's holding company IAG in 2012.

³²³ Tjomsland & Wilsberg (1995): 75–83

often described as *ultra low-cost carriers*. Some airlines are obviously network based, such as SAS and KLM. While ultra low-cost carries dominated in the 1990s, some low-cost and some network carriers have increasingly converged towards a hybrid model to a point where categorizing the two is all but impossible.

The later success of hybrid operations, of which Norwegian is a prime example, shows that the low-cost versus network heuristic is becoming increasingly disjointed.³²⁴ There are clearly advantages to network operations, and if used sparing can help add revenue without adding much to costs. On the other hand many airlines have thrived as network carriers, with perhaps Lufthansa being the most prominent success. Throughout European countries, one major network carrier has normally been able to survive, but not more.

5.4.2 Prerequisites for Braathens to transform to low-cost operations

Classifying Braathens as either-or will not be particularly helpful. On the other hand, it can be useful to look at in which areas Braathens met the low-cost criteria, and to which degree adopting these processes aided the company. A complete, schematic break-down of the criteria and whether Braathens, SAS, Color Air and Norwegian met these, is presented in appendix A. Braathens was leaning against a hybrid model, at least in some areas. The overall goal of a low-cost carrier differs in two fundamental ways from a network carrier—an opportunistic approach to routes and simplicity of operations. It is perhaps in these two areas that it is most fruitful to examine Braathens.

Opportunistic route-planning involves having a much more aggressive stance on which and how often routes are flown. Routes can be established and closed down at short notice when the airline sees opportunities or realizes that they are losing money. Similarly, frequency is based on the number of passengers, and low-cost carriers emphasize filling up their planes rather than flying half-empty aircraft in order to capture a few more high-paying business customers. Interestingly, Braathens SAFE followed this approach when they commenced flights to London and when they introduced routes to Northern Norway. At first only two daily round trips were offered, and then only as they knew they had sufficient patronage did they increase the number of flights. Also most international routes followed this approach, often with only a few flights per week.

From 1997 Braathens became much more aggressive. If they flew a route, they wanted to offer the most flights in order to capture just a few more business passengers, raising their costs much more than the extra revenue could support. Here Braathens failed at what is perhaps the low-cost carriers

³²⁴ Burghouw & Wit (2015)

most prominent strategic advantage—to pull out of or reduce the number of daily flights on any route they are losing money on. But this requires a mindset where routes can be cut without concern for the ramifications for the rest of its operations, not least because "completeness" of their network is not regarded as paramount.

Notable areas where Braathens met the low-cost criteria included, at least initially, using only a single type of aircraft; buying new and fuel efficient aircraft; and operating with a lean management. Few of the other structural issues were in place. Low load factor with relatively small aircraft and high frequency, interlining, partnerships with other airlines, expensive ticket commissions, and on-board frills (at least for Best passengers) were combined with inflexible and long turn-around times. Braathens therefore bypassed many of the potential operational savings which a low-cost model would have provided.

The success of Back was dependent on delivering a premium product to business travelers and cheaper travel to leisure travelers. Low-cost carriers gain their cost advantage from structural sides of their operation. The lack of complimentary meals only accounts for a trivial aspect of cost reductions. Issues not addressed by Braathens through the Back policy include reduced turn-around times, larger aircraft and reduced frequency, low-overhead marketing and sales channels (at first call centers and later Internet), fewer bases, increased economy of scale through a unified and expanding fleet size, and outsourcing sales, ground and technical services. Instead, Back contributed to increased operating costs through increased customer complaints at the gate and in the cabins, increased boarding time and time needed to reconfigure the cabin and seating. Back therefore did not allow Braathens to capitalize on many of the cost-saving issues addressed by low-cost carriers.

At the heart of the issue is that network carriers provide a number of advantages to customers which allow them to capture a large group of high-paying business travelers. This additional revenue forces the airline to make a series of operational choices which push up costs. Low-costs carriers make their savings in structural ways that make their service unappetizing for these high-revenue clients.

Braathens had some of the assets which could have given it leverage to innovate: it had a strong brand, was well-capitalized, had a well-run organization, modern aircraft and a critical market share. But it lacked the mind-set, a willingness to compromise a declining group of business travelers nor the structure to operate as a low-cost carrier. It thereby forewent perhaps its only opportunity to transform into a carrier which could have challenged SAS.

Braathens therefore had a very good opportunity to become what would today have been classified as a hybrid operation. By flying less often with slightly larger, but fewer, aircraft, they would have been able to retain a large portion of their existing patrons while reducing their operational costs dramatically. This would of course have reduced income from some high-paying customers, but Braathens was due to other restriction at a severe disadvantage to capture those travelers anyway.

5.5 Accusations of discrimination

It has become part of Braathens' corporate lore that they were constantly discriminated by the government. Most notably it is mentioned upon occasion by Wilsberg and can therefore be worth dwelling upon, especially since he attributes as a contributory cause to Braathens' demise.

As previously mentioned, both Kahn and Sheth have emphasized that a deregulated aviation market works best when the authorities assume the role of secondary regulation. This means that while route and fare structures are left to the market, other aspects remain under political control. Of particular interest here are regulations on emissions, antitrust and anti-completive behavior, as well as taxation. Issues tied to maintenance, safety and security could also be looked at, but are left out because they remained tightly regulated and had no influence on Braathens' competitive situation.

As outlined in chapter 2, Braathens was for many decades a supporter of competition and hence deregulation. The company had lower unit costs than SAS and was convinced that in a deregulated market they would be able to not only retain their actual customer base, but also capture customers from SAS. This turned out not to be true, as the company failed to capitalize on its lower operating costs.

Wilsberg states that Braathens would have been better off if the deregulation had been postponed. He emphases that Widerøe, following a similar fleet renewal, was not made subject to competition until 1997. This is a rather inconsistent line of argumentation. Retrospectively it is unquestionable that for Braathens' sake they would have been better off if never subject to competition. Their profits were also consistently good during the first three years of competition, with little change to price or cost levels.

More contentious is the question of why Braathens bought the new aircraft if they thought that it would be a financial burden. The government paper proposing competition was published and the proceedings in the EU were well under way in 1987 when Braathens ordered its new fleet. It must have been obvious that the chances of deregulation were significant and that Braathens was taking a calculated risk. However, the issue can also be turned on its head. Most Western airlines chose to

replace their -200-fleets during the 1990s, so it must have been widely accepted that this was a profitable move. It must be presumed that Braathens, as a private, profit-maximizing company did the same calculation. The steep increase in the oil prices if anything made the move more profitable. It is therefore difficult to see what evidence there is that government timing influenced negatively on this issue.

There is also the issue of aircraft emissions. Braathens operated a newer fleet with lower emissions than SAS. This was somewhat equated after SAS started taking delivery of new aircraft from 1998. The government could have taxed in a different manner, either placing it on carbon dioxide or fuel, or on noise. If only done by Norway, SAS could have shifted its newest aircraft to Norway, quickly equating the emission levels. Such a policy was not carried out in other European countries, and it is difficult to criticize the Norwegian government for not introducing a policy that no other countries pursued. Even if emission or noise had been taxed, experience from the seat tax showed that the airlines would simply disregard any incentives and pay the price to pursue their quest for higher frequency, not matter the cost.

The seat tax had a strong influence on the competitive situation during 1998 and 1999. It hit Color Air particularly hard, and was quite possibly responsible for its quick demise. There was a slight skew to the tax, with three of the four routes targeting Braathens' strong services. Quite in contrast, the tax should instead have given SAS and Braathens a strong incentive to reduce their capacity, especially when their load factor was declining. When this did not happen, it was tied to the airlines' fixation on market shares. Being carried away in like that was not something that the government could be held responsible for.

For Braathens', Wings was a boost during its initial confrontation with Color Air. Wings and EuroBonus were both strong enough for the two incumbents to by and large keep the business traffic. Once Color Air was out of the equation, what had previously been a strength turned to a weakness. As EuroBonus became ever stronger, Wings became a liability. Frequent-flyer programs are in their very nature anti-competitive, which is the exact reason they are employed by airlines, despite their cost.

As outlined in chapter 3, the authorities allowed SAS to gain control over several regional carriers, including Widerøe. This gave SAS a slight advantage over Braathens, but the sher amount of cross-generated traffic was not enough to account for the losses. As both airlines were losing money, shifting traffic between them would not resolve the issue.

Overall, there were some government decisions which were not in Braathens favor, and some which could be criticized in terms of allowing SAS to build stronger market power. But there is no evidence that the authorities systematically discriminated Braathens. Perhaps more importantly, even if the above-mentioned areas were seen as discriminatory, the outcome would very likely have been the same, as they simply did not touch on the most central issues causing Braathens' decline.

5.6 International influences

One way of looking at the development of Braathens, and for that matter SAS, is in terms of international influence on operations and business practices. Managerial influence, tied to such issues as management by objectives and floating on the stock exchange, transformed Braathens from a tight-nit family conglomerate to a more focused, public company. The inception of KLM as a shareholder and entering into the Swedish domestic market made Braathens a transnational company in 1997. Meanwhile the airline started adapting segmentation of customers and marketing management as a strategic tool.

Many of these ideas and concepts had their origin in the United States. This was not unique for Braathens, but was common amongst many European carriers. It was not least due to the Europeans looking across the Atlantic for suggestions for how to deal with deregulation, a process originated there. Schröter presents an overarching model stating that many of the business developments which have been innovated in Europe have their origins from the United States. However, when implemented in Europe they are adapted and re-modeled, often in a milder form. This can be exemplified in relation to Braathens, such as lack of outsourcing of ground services and never adopting the low-cost model, which was at the time seen as a rather American approach.

One particularity Braathens faced was that SAS, despite its unwieldy structures, was one of the most innovative airlines during the 1980s and 1990s. In terms of marketing it held an advantage over Braathens, for instance in terms of business traveler focus and co-founding the first global airline alliance. Braathens was not a particularly innovative company and it always seemed was one step behind SAS. A lot of Braathens' innovations were therefore first and foremost responses to SAS.

325 Schröter (2005): 127-129

89

5.7 Epilogue

5.7.1 Corrective measures—too late

The authorities were highly interested in the failure of Braathens. For a few months during 2002 it looked as if SAS had essentially captured the entire domestic market, and deregulation would have been a complete failure. Not only was SAS allowed to buy Braathens, but they also bought the remaining shares in Widerøe, ³²⁶ who had previously bought Norsk Air. In eight years, Norway had gone from a regulated non-market with four significant airlines to a market with only a single player. It was an uncanny replay of the events which had unfolded in Sweden ten years earlier.

Following the failure of Color Air, the authorities and research community became increasingly interested in studying the airline market. This was in part driven by the need for policy which could counter-balance the shortcomings of brute competition. An early concern was the impact that the frequent-flyer programs had, especially as to how it had hindered Color Air from capturing sufficient business travelers. In a move which for Braathens' sake came several years too late, the Competition Authority banned all frequent-flyer points on domestic flights in Norway in 2002. They stated that such programs could distort the market and be a hindrance for new airlines to enter the market.³²⁷

At the time Professor of Economics Victor D. Norman was serving as Minister of Labor and Government Administration. He was willing to go far to secure that a new contender could rise to challenge the newly formed behemoth. Meanwhile SAS terminated the feeder contract it had with Norwegian Air Shuttle. Left with few other alternatives, the small regional carrier contemplated if it should start up as a low-cost carrier in direct competition with SAS and Braathens.³²⁸

A back-room deal was made between Norwegian and Norman. In an unprecedented move, he instructed his ministry to sign an agreement with Norwegian making it the state's preferred carrier, without any public tender. The other critical move was the ban on frequent-flyer programs.

According to Trumpy, the two policy moves were pivotal for Norwegian to start low-cost operations on 1 September 2002. 329

Unlike in the US, Norman chose to deal with Kahn's criticism from the 1980s. Where American authorities had stood by silently as the market consolidated into fewer players with increasing

³²⁶ Lillesund (17 April 2002)

³²⁷ Norwegian Competition Authority (2002)

³²⁸ Trumpy (2002): 81–91

³²⁹ Trumpy (2002): 81-91

market power, Norway dared to carry out secondary regulation. For Braathens, the rescue mission came too late.

Whether Braathens' demise was good or bad depends the viewpoint. Braathens failed because of its inability to transform itself and its pursuit of a unsustainable business model. Its downfall was costly for its owners, its employees and many of its loyal customers. For society, it was quite possibly for the better. Its demise paved way for a new entrant who could grow from scratch without the baggage hindering it from effectively challenging SAS. A new Norwegian airline arose to much greater heights than Braathens could ever hope to dream of.

Yet at least two concerns must be raised. Labor unions have boycotted Norwegian due to allegations of social dumping.³³⁰ While Norwegian its unquestionably more efficiently operated than Braathens, part of this comes from the sacrifices of the employees. Since its inception, Norwegian has participated in lowering air fares and increasingly flown holiday-makers to short weekend city holidays. Most recently this includes intercontinental leisure trips. In an era in which climate change is an increasing concern, an uncontrolled growth in air travel could just as well be viewed as a liability for society.

5.7.2 Braathens' legacy

Legally it was SAS Braathens and subsequently SAS who were the legal successors of Braathens. As of this writing SAS still operates some of Braathens' aircraft. ³³¹ Yet perhaps a stronger argument can be made for that Norwegian is the spiritual successor of Braathens. After the take-over the reduction in overcapacity in SAS Braathens led to massive lay-offs. Many ex-Braathens-employees found jobs with Norwegian and their subcontractors. ³³² Not only was Norwegian a former Braathens subcontractor, but it bought the same type of aircraft, pained them the same color, emphasized its Norwegian-ness and egalitarianism. It even bought Braathens former head office at Fornebu³³³ and maintenance base at Sola. ³³⁴ However, there was a radical change. The new airline brought a new paradigm to its strategic thinking, ripping away the heritage from the regulated past and allowing a more aggressive and global outlook.

Norwegian has moved beyond Norway and has become the pan-Nordic, mini-SAS which failed to materialize in the 1990s. With the presentation of statistics for 2016, Norwegian for the first year

³³⁰ Klassekampen (31 October 2013)

³³¹ As of 2017, SAS still operates seven of the Boeing 737-700s delivered to Braathens. (Airfleets 2017)

³³² Rapp (17 July 2002)

³³³ Schmidt (25 February 2010)

³³⁴ Loretzen (14 September 2007)

surpassed SAS in number of passengers flown,³³⁵ making it the eighth-largest carrier in Europe.³³⁶ It has for years been the continent's third-largest low-cost carriers, behind Ryanair and easyJet. In many ways Norwegian has become what some hoped the Scandinavian second airlines could have done, had they been able to coordinate their efforts in the 1990s. However, it may have been the corporate reboot which made the transition and subsequent growth possible.

The Braathens brand in aviation lives on, albeit in Sweden. At the time of the merger, the remaining Swedish operation, i.e. Malmö Aviation, had to be spun off. In the end Braganza took over ownership, ultimately resulting in the holding company Braathens Aviation owned by Per G. Braathens, the brother of Erik G. Braathens.³³⁷ The group has consolidated Malmö Aviation and many of the regional carriers in Sweden into Braathens Regional Aviation and has been able to dominate this segment in recent years.³³⁸

5.8 Conclusion

Braathens never developed a sustainable business model. It fell into the peril of frequency, using the costly mechanism of flying more often in order to attract more business travelers. This zero-sum game was also played by SAS, resulting a rise in structural costs for both airlines, without any gain to the number of passengers. However, Braathens had a smaller international network and smaller coffers, placing it at a disadvantage.

Braathens was constantly reacting to SAS and trying to become more similar to the competitor. A more gainful approach would have been to become more dissimilar. One possibility was transforming into a low-cost carrier, but this would have required a significantly different approach to many major strategical issues. One concern was the fleet, which was made up of rather small aircraft. As Braathens expanded, the fleet grew to six different models, incompatible with a low-cost approach.

Accusations of discrimination have been refuted and are better explained as part of a corporate narrative used to portray the airline as an underdog. After Braathens fall, the authorities introduced secondary regulations, removing competitive barriers which allowed the newcomer Norwegian to succeed where Braathens had not.

³³⁵ Norwegian News Agency (8 February 2017)

³³⁶ Measured in terms of airline ownership groups, as is common in industrial rankings. (AirportsinEurope 2016)

³³⁷ *Aftenposten* (21 July 2005)

³³⁸ Lindberg (22 January 2015)

6 Conclusion

The overarching goal of this thesis has been to investigate the demise of Braathens SAFE. The direct cause of its failure was that Braathens flew too many flights in relation to the number of passengers, leading to a insufficient load factor. This became decisive when combined with its inability to collect sufficient yield to cover its operational costs. Put another way, Braathens flew too often with too few passengers.

The underlying cause of this overcapacity was found in the relationship between Braathens and its two main competitors, SAS and Color Air. SAS had a advantage over Braathens through its extensive international and intercontinental network. It used its power to quench competition in Sweden and Denmark and was a leading adapter of alliances and frequent-flyer programs. SAS was an early innovator, and borrowed many of its tricks from the experiences from deregulation in the United States. When operating as a network carrier, the size of the network is decisive for success.

It is difficult to see how Braathens possibly could keep up with SAS' momentum in the business market. Despite this, Braathens aimed at becoming an equal with SAS as a network carrier. By aiming at a high frequency, Braathens lost its opportunity to transform itself to something different from SAS. In an all-out assault, Braathens was doomed to fail against the wealthier competitor.

A key strategic mistake was that Braathens tried to match SAS rather than being better than them in complementary areas. The later success of Norwegian and other low-cost carriers shows that the way to challenge a network carrier is to differentiate and focus on filling up aircraft, while letter the incumbent airline catch most of the high-paying business travelers.

The odds were stacked against Braathens. They were one of many second airlines in Europe, and none of these have survived to the time of writing. Most ended up being bought by their larger competitors, or simply went bankrupt. Braathens' fate is therefore one widely shared.

Some of Braathens' challenges were rooted in its five decades of operation in regulated aviation. During this era, Braathens was a fierce proponent of competition. Yet at the dawn of deregulation, they took a much more passive stance and argued for its postponement. Regulation also forced upon them a national rather than continental mindset. Both they and SAS were used to stable conditions and had built a bulky organization. Braathens had a slight cost advantage and imagined that this, combined with its strong customer loyalty, would enable to growth in the home market.

An option which could have been a game-changer became evident around 1992—the creation of a so-called mini-SAS. By partnering or merging with Linjeflyg, Maersk Air and possibly Finnair,

Braathens could have created a unit with a similar size and scope to take on SAS directly. SAS' merger with Linjeflyg stopped these plans, but there were opportunities also later to revisit such a strategy. Yet it is questionable if this had been sufficient, as these airlines partnering up would still not deal with the lack of an international network out of the capital cities.

The watershed came with the opening of Gardermoen. The first four and a half years of deregulation were in a sense just a ruse. The capacity restraints at Fornebu disciplined the airlines to operate a reasonable number of flights and they avoided competing directly on price. The lack of a possibility of a frequency war confined the two airlines, and the risk of a mutually disruptive tit-fortat response to reduced ticket prices created a stalemate. These were years when SAS and Braathens became more alike.

Leading up to the opening of the new airport, both airlines focused on refining their products in order to better capture higher market shares. SAS looked out; it created a global alliance and was, through this and its existing international network, able to attract a growing number of business travelers. Yet Braathens fought aggressively for these same customers, allowing them to negotiate aggressive agreements. Thus customers who traditionally generated high margins eroded away as a attractive source of revenue.

Braathens took three major steps in 1997 and 1998 in order recreate itself—it entered the Swedish market, it joined into a partnership with KLM and launched the new service paradigm Best and Back. All three backfired and instead aggravated Braathens' difficulties. Strategically, they pressed Braathens closer to SAS instead of creating an alternative approach. This was the last chance for Braathens to have transformed itself into a modern, low-cost carrier which could have challenged SAS. However, it is uncertain if even this could have been a viable option, as there could have been too much internal resistance within Braathens to carry out the necessary transformations.

Entering the Swedish market became a financial nightmare for Braathens. The purchase of two airlines with very different approaches and feeding two different Stockholm airports, created confusion for the customers and failed to create any network effects. It did not help much that this led to six models of aircraft being used throughout the group. Services through Arlanda were therefore discontinued in 1999.

KLM turned out to be a weak partner. The union was rather one-sided, with KLM using it mostly to feed its hub. Compared to SAS' network and not least Lufthansa's out of Frankfurt, entering the Wings Alliance was simply not attractive enough for business travelers to sign up for.

Best and Back broke the perception of Braathens' as egalitarian and the people's airline. With SAS increasingly seen as Swedish and for businessmen, Braathens threw away both its main branding values in a single campaign. Although it did not necessarily turn away a lot of customers, Best and Back contributed to disenfranchise the airline.

The opening of Gardermoen saw a head-on competition with both Color Air and SAS. Expanded capacity was used by all three to increase frequencies on many domestic services. Customers were attracted by more departures and lower ticket prices. But a slump in the oil price saw a near stagnation in the number of business passengers. At the same time a seat tax placed a high extra expense on the airlines, especially since they were forced to pay it on all the empty seats they were flying around. Even with Color Air's demise Braathens failed to back down. It then simply became a question of time before the coffer would run out. When it did, SAS was ready to take over.

Braathens attempted time again to copy SAS, making it more a reactionary airline than the more proactive SAS. Braathens focused on being a me-too network carrier. Evidence world-wide shows that this was not possible. As long as Braathens pursued this overall strategy, it is very difficult to see how it could have survived. In nearly every important aspect it was inferior to SAS. As evident from later, a total transformation to a low-cost carrier would have been the only way out. If this could have been successful is mere speculation, but experience shows that transforming an airline to a low-cost carrier is burdened with resistance.

The findings here support many of the conclusions in the literature. This includes Iversen's claims of an inconsistent strategy and Wilberg's claim that there were no easy ways to have survived. Salvanes, Steen and Sørgård, and Standenes are both supported in that competiton seems mostly to have been tied to capacity rather than price. Lian's claim that there as of 1996 was tacit collusion and no aggressive competition is also supported. There has not been found evidence to support Wilsberg's claim of government discrimination. This thesis has also gone deeper into the issues of Color Air and explored the possibilities of transforming into a low-cost carrier, including examining the fleet composition.

The demise of Braathens paved way for Norwegian Air Shuttle. On one hand the removal of one airline left space in the market for a second carrier. Just as critical were the lessons learned by the authorities. They followed Kahn's advice and introduced secondary regulations, particularly banning of frequent-flyer programs, in order reduce SAS' market power. Built from scratch, yet clearly building upon the foundation left by Braathens, it was able to take on SAS, its success leaning on the many errors experienced by Braathens.

References

Literature

- Åsheim, Frode (2004) Fra konsensus til konflikt: en studie av samordningsprosessen mellom SAS og Braathens i perioden 2001–2002 Master thesis in sociology at the University of Oslo
- Belobaba, Peter; Amedeo Odoni and Cynthia Barnhart (eds.) (2009) The Global Airline
 Industry Chichester: Wiley
- Björnelid, Richard (2013) *Kunsten å styrte et flyselskap* Oslo: Libretto
- Braathen, Ludvig G. (1957) *Alltid videre: et kapittel av norsk luftfarts historie* Oslo: Tanum
- Braathen, Ludvig G. (1975) *Veien fremover* Oslo [self-published]
- Bredal, Dag (1998) Oslo lufthavn Gardermoen: Porten til Norge. Oslo: Schibsted
- Buraas, Anders (1972) Fly over fly: Historien om SAS. Oslo: Gyldendal Norsk Forlag.
- Burghouw, Guillaume & Jaap G. de Wit (2015) «In the wake of liberalisation: long-term developments in the EU air transport market» *Transport Policy* **43**(October): 104–113
- Chang, Yu-Chun & George Williams (2002) "European major airlines' strategic reactions to the Third Package". *Transport Policy*, **9**(2): 129–142.
- Dempsey, Paul Stephen (2008) "The financial performance of the airline industry post-deregulation". *Houston Law Review*, **45**(2): 421–485
- Ellemose, Søren (2009) *Luftens helte* Aarhus: Jyllands-Posten Forlag
- Fuglem, Kjell (1972) *Braathens SAFE i norsk luftfartspolitikk saksbehandlingen og politikernes avgjørelser 1946–1966* Master thesis in history at the University of Trondheim
- Fuglum, Knut (1994) *Luftfart*. Oslo: Yrkesopplæring.
- Gudmundsson, Sveinn Vidar (2014) "Mergers vs. Alliances: The Air France–KLM Story" SSRN Electronic Journal June 2014.
- Hall, Åke (2002) *Luftens Vikingar en bok om SAS alla flygplan*. Nässjö: Air Historic Research.
- Hanisch, Tore Jørgen; Espen Søilen & Gunhild Ecklund (1999) Norsk økonomisk politikk i det 20. århundre – Verdivalg i en åpen økonomi. Kristiansand: Høyskoleforlaget.

- Haugland (2000) Menneskelig motstand mot organisasjonsendringer: en empirisk studie av sammenhengen mellom organisasjonsendringer og menneskelig motstand mot endringer i flyselskapet Braathens. Master thesis in pedagogy at the University of Oslo.
- Hill, Malcolm L. (2002) *Boeing 737* Ramsbury: The Crowood Press
- Iversen, Helge R. (2002) *The deregulation of Norwegian civil commercial aviation causes and effects* Master thesis in history at the University of Bergen.
- Karsson, Linda (2007) *Struggling mergers and acquisitions and their external relations: SAS Braathens* Master thesis in international business at the Norwegian School of Economics.
- Kontaktutvalget for EF-transport (1992) Transport og kommunikasjon og EFs indre marked.
 Oslo.
- Lazzarini, Sergio G. (2007) "The impact of membership in competing alliance constellations: Evidence on the operational performance of global airlines" *Strategic Management Journal*. **28**: 345–367.
- Lian, Jon Inge (ed.) (1989) *Take of: Utviklingen av norsk luftfart* Oslo: Bedriftsøkonomens forlag
- Lian, Jon Inge (1996) Økt luftfartskonkurranse? En situasjonsanalyse 1 2 år etter dereguleringen av stamrutenettet i Norge. Oslo: Institute of Transport Economics
- Lian, Jon Inge; Knut Sandberg Eriksen; Henning Lauridsen and Arne Rideng (2002) Norsk innenlandsk luftfart – konkurranse og monopol. TØI-Rapport 586/2002. Oslo: Institute of Transport Economics
- Losnegård, Gaute (2008) Norsk Rutebilhistorie Leikanger: Skald
- Martinsen, Caroline Folan; Miøen, Maria (2014) *Bonusprogrammer i innenriks luftfart en empirisk analyse av konkurransemessige effekter* Master thesis in business administration at the Norwegian School of Economics
- McInally, John (2011) *Eurocontrol History Book* Brussels: Eurocontrol
- Melling, Kjersti (2009) *Nordavind fra alle kanter* Oslo: Pilotforlaget
- Michaelsen, Anita (2002) SAS sitt oppkjøp av Braathens: implikasjoner på pris og avgangsfrekvens ved monopol eller duopol. Master thesis in economics at the University of Tromsø.
- Moller, Helene Reeve (2006) *Storkundeavtaler i Norsk Luftfart* Master thesis in economics at the University of Oslo

- Nelldal, B. L. (1998) "The experience of the SJ X2000 tilting train and its effect on the market". *Proceedings of the Institution of Mechanical Engineers*. **212**(1): 103–108
- Norsk luftfart i forandringens vind (1993) Oslo: Det Norske Luftfartselskap
- Ødegård, Bernt Arne; Randi Næs & Johannes Atle Skjeltorp (2008)
 "Bransjesammensetningen på Oslo Børs". *Praktisk økonomi & finans*. 25(4): 65–73.
- Olsen-Hagen, Bengt Charles (2014) *Offshore Helicopters: Helikopteraktiviteten på norsk kontinentalsokkel*. Bodø: Aviation Forlag.
- Pigott, Peter (2014) Air Canada: the History. Toronto: Dundurn.
- Randøy, Trond and Siri Pettersen Strandenes (1997) "The effect of public ownership and deregulation in the Scandinavian airline industry" *Journal of Air Transport Management* 3(4): 211–215
- Rhoades, Dawna L. (2003) *Evolution of International Aviation: Phoenix Rising*. Aldershot: Ashgate.
- Reitan, Sverre Utne (2003) *Luftfarten på Haugalandet fra 1914 til 2004* Karmøy: Eget Forlag.
- Resser, Tor (2005) Stord lufthamn Sørstokken Stord: Sunnhordland Lufthavn.
- Rideng, Arne & Jon Martin Denstadli (1999) *Reisevaner på rutefly 1992–1998* TØI Rapport 441/1999 Oslo: Institute of Transport Economics.
- Sandal, Øystein (2007) *Samlokalisering av flyavganger: en empirisk undersøkelse av avgangstid mønster på det norske stamrutenettet* Mater thesis in business administration at the Norwegian School of Economics.
- Salvanes, Kjell G.; Frode Steen & Lars Sørgard (2003) «Collude, Compete, or Both?
 Deregulation in the Norwegian Airline Industry» *Journal of Transport Economics and Policy*, 1 September 2003, 37(3): 383–416
- Salvanes, Kjell G.; Frode Steen & Lars Sørgard (2005) "Hotelling in the air? Flight departures in Norway" *Regional Science and Urban Economics*, **35**: 193–213
- Sanz, Michael (2006) *Linjeflyg ett folkflyg från start till landning* Alt om Hobby
- Schröter, Harm G. (2005) *Americanization of the European Economy: A compact survey of American economic influence in Europe since the 1880s*. Dordrecht: Springer
- Sheth, Jagdish et. al. (2007) Deregulation and Competition: Lessons from the Airline Industry New Delhi: Sage
- Steinarsson, Brynjar (2002) *Braathens: hvorfor gikk det som det gikk?* Master thesis in business administration at Agder University College.

- Steine, Tor Olav (1992) Fenomenet Norsk Data Oslo: Universitetsforlaget.
- Strandenes, Siri Pettersen (2004) "Konkurranse og konkurransehindringer i norsk luftfart".
 In Kåre P. Hagen, Agnar Sanddmo and Lars Sørgård (eds.) Konkurranse i samfunnets interesse. Bergen: Fagbokforlaget.
- Tjomsland, Audun and Kjell G. Wilsberg (1995) *Mot alle odds: Braathens SAFE 50 år på norske vinger*. Bærum: Braathens SAFE.
- Tjomsland, Audun (2005) *Høyt spill om Torp* Sandefjord: Tjomsland Media
- Tosh, John (2010) *The Pursuit of History* Harlow: Pearson
- Trumpy, Jacob (2012) *Høyt spill* Oslo: Kagge Forlag
- Wilsberg, Kjell G. (2015) *På Norske Vinger* Ludvig G. Braathens fond for fremme av norsk luftfart.

Sources

Archives

- Norwegian Aviation Museum. Bodø. (NLM)
 - Braathens SAFE (NLM/As-1003/06)
 - Braathens SAFE Flygeforening (NLM/As-1001/12)

Videos

- *Braathens SAFE videobrev*. Video newsletter digitalized and made available by the Norwegian Aviation Museum.
 - 1991-02, no. NL08040013V

Periodicals

- BU-stikka: Internmagasin for Braathens SAFE Bærum: Braathens SAFE
- Move Bærum: Braathens
- *BU-Nytt* Bærum: Braathens

Newspaper and magazine articles

- *Aftenposten* (16 December 1983) "Braathen vil få helikopterruter". p. 4.
- Aftenposten (3 April 1984) "Braathens skeptisk til 'miniSAS'". p. 29

- Aftenposten (15 March 1985) "Bare SAS støtter dagens rutedeling". p. 37.
- *Aftenposten* (16 September 1985) "Inter Nor og Braathens SAFE: Samarbeide om forretningsfolk". p. 34.
- *Aftenposten* (12 May 1993) "Ber om gjeldsforhandlinger: Norsk Data til skifteretten". p. 27.
- *Aftenposten* (31 October 1996) "Honnørpris til Cato Guhnfeldt". p. 18.
- *Aftenposten* (1 February 1997) "Fred. Olsen trapper ned flyselskap" p. 16.
- Aftenposten (14 May 1998) "SAS-avtale i Danmark" p. 50.
- *Aftenposten* (21 July 2005) "Svinger seg i toppen". p. 22.
- Alver, Vigdis; Hansen, Frode (21 June 1998). "Pensjonist Air". *Dagbladet* p. 6.
- Asgaut, N. (1 September 1989). "Braathen med helikopterselskap". *Dagens Næringsliv*. p. 2.
- Bajak, Frank (8 December 1996). "Black market of the skies Substandard airplane parts pose risk". *Columbus Dispatch*. p. 5B.
- Berglihn, Harald (21 February 1996). "Kjøper i park". *Dagens Næringsliv*. p. 24.
- Buzzi, Kirsten (17 October 2007). "Første charterfly fra Rygge". *Daqbladet*. p. 34.
- Chuter, Andew (14 January 1998) "Britannia will rule carrier Blue Scandinavia after takeover". *Flight International*. p. 12.
- Commuter Regional Airline News International (16 February 1998) "Air Foyle To Manage New Norwegian Low-cost Operator Color Air" 11(4). p. 1.
- *Dagbladet* (17 Januar 1998). "Color Air utfordrer til luftslag". p. 13.
- Dahl, Flemming (18 August 1998). "Braathens tar grep om Sverige". *Aftenposten*. p. 38.
- Dahl, Flemming (19 August 1998). "Hardere kniving Oslo–Stockholm". *Aftenposten*. p. 30.
- Dahl, Flemming (21 September 1998). "Hard kamp om storkundene". *Aftenposten*. p. 34.
- Dahl, Flemming; Haraldsen, Christian (28 September 1999). "Color Air satt på bakken Tapte 1000 kroner på hver passasjer". *Aftenposten*. p. 32.
- Dahl, Flemming (16 October 1999). "Braathens øker billettprisene for å overleve".
 Aftenposten. p. 23.
- Eidsten, Kjell Petter (27 June 1998). "Color Air fjernet flyseter og økte belegget". *Dagens Næringsliv* . p. 2.
- Eliassen, Haakon E. H. (13 February 1999). "Braathens endrer omstridt prissystem for flyreisende Klasseskille i Norge, ikke i Sverige". *Aftenposten*. p. 18.
- Elsrud, Sigrid (24 May 1988). "Norway Airlines flyr videre". *Aftenposten*. p. 22.

- Enghaug, Pål (22 December 1998). "Tøff konkurranse i luften i november: 45 av 100 flyseter tomme". *Aftenposten*. p. 2.
- Eriksen, Kjell-Gunnar (19 June 1990). "Fullt sammenbrudd". *Nordlys*. p. 8.
- Erikstad, Terje & Rune Wangsmo (22 May 1999). "Flypriser må opp 50 pst." *Dagens Næringsliv*. p. 10
- Evensen, Kjell (7 November 1988). "Widerøe åpner for nye eiere". Dagens Næringsliv. p.
 10.
- Evensen, Kjell (16 December 1992). "Braathens til Murmansk". *Dagens Nærignsliv*. p. 8.
- Flight International (30 November 1985) "Sweden starts charter again" p. 2.
- Flight International (19 March 1988) "EC approved Bcal takeover" p. 6.
- Flight International (12 June 1991) "Seconds out" p. 124–125.
- Flight International (5 July 1995) "Transwede is forced into radical change" p. 9.
- Flight International (27 September 1995) "Denmark will deregulate, but little will change"
 p. 14
- Flight International (28 January 1998) "SAS buys in Finland" p. 16
- Flight International (26 August 1998) "Braathens purchases Malmö Aviation" p. 6.
- Froste, Calle (16 October 1995). "Regionalflyg nästa steg för SAS". Svenska Dagbladet. p.
 40.
- Guhnfeldt, Cato (17 March 1984). "Strid om Skandinaviaflyvninger: SAS bryter med Busy Bee". *Aftenposten*. p. 8.
- Guhnfeldt, Cato (23 April 1993). "SAS må vente: Kompromiss om luftfart". *Aftenposten*. p.
 4.
- Guhnfeldt, Cato (27 June 1996). "Braathens-raid i Sverige". *Aftenposten*. p. 3.
- Guhnfeldt, Cato (25 January 1998). "Rekordtrafikk på Fornebu". *Aftenposten*. p. 4.
- Gustad, Ragnhild (15 October 2001). "Back to gamle Braathens gardin. *Nordlys*. p. 10.
- Hansen, Lars Ditlev (24 October 1985). "Braathens vil fly fire utenlandsruter". *Aftenposten*. p. 44.
- Hansson, Lennart (9 November 1999). "Kris i Malmö Aviation 500 risikerar jobben".
 Tidningarnas Telegrambyrå.
- Hansen, Lars Ditlev (8 April 1992). "Norway Airlines". *Aftenposten*. p. 24.
- Hellestøl, Yngve (14 October 1992). "Alle er sikret hjemreise: Norway Airlines gir opp".
 Aftenposten. p. 24.

- Johannessen, Bjørn Erik (30 April 1998). "Flyavgift–Synnes 1–1". Nordlys. p. 11.
- Jeziorski, Andrzej (1 April 1992). "Transwede plans SAS monopoly fight". Flight International. p. 13.
- Klassekampen (31 October 2013) "Får liten støtte til å boikotte Norwegian". p. 7
- Knudzen, Thomas (28 October 1992). "Vil ha sterkt nordisk flyselskap". *Aftenposten*. p. 28.
- Knudzen, Thomas (7 October 1993). "Helikoptersalg ga 170 mill.". Aftenposten. p. 32.
- Larsen, Trygve (1 February 2002). "Lander på delt løsning". Dagens Næringsliv. p. 4.
- Learmount, David (5 July 1986). "How to be busy in a small hive." *Flight International*. p. 34–39
- Lillesund, Geir (29 April 1994) "Braathens SAFE instiller Oslo–Malmø fra 27. juni".
 Norwegian News Agency.
- Lillesund, Geir (3 March 1998) "Braathens med to klasser og nytt emblem". Norwegian News Agency.
- Lillesund, Geir (6 April 1998) "Flyseteavgiften gir Finansdepartementet hodebry".
 Norwegian News Agency.
- Lillesund, Geir (16 June 1998). "Color Air med samme billettpriser over hele landet" (in Norwegian). Norwegian News Agency.
- Lillesund, Geir (5 August 1998). "Mange ledige seter Oslo-Ålesund" Norwegian News Agency. p. 10.
- Lillesund, Geir (27 September 1999). "Sunde: Skulle aldri ha startet Color Air" Norwegian News Agency.
- Lillesund, Geir (14 June 2000). "Slutt for Braathens på Stockholm". Norwegian News Agency.
- Lillesund, Geir (15 November 2000). "Braathens fortsetter omleggingen kutter kortruter".
 Norwegian News Agency.
- Lillesund, Geir (17 April 2002). "SAS kjøper seg opp i Widerøe for 131 millioner".
 Norwegian News Agency.
- Lindberg, Tommy (22 January 2015). "Sundsvallsflyg blir BRA". Sundsvalls Tidning.
- Lorentzen, Ludvig (14 September 2007). "Livet etter Braathens". *Stavanger Aftenblad*. p. 16–24
- Mikalsen, Knut-Erik (31 March 2015) "–Braathens hadde ikke en sjanse til å overleve flykrigen" *Aftenposten*. p. 8–9

- Moberg, Knut (31 August 1999) "Gardermoen er flyselskapenes mareritt". *Daqbladet*. p. 7.
- Norwegian News Agency (18 February 1988) "Flyselskapet Coast Aero Center havner i skifteretten"
- Norwegian News Agency (7 March 1988) "Flysjef i nystartet selskap avsatt etter en måned".
- Norwegian News Agency (11 October 1989). "Flyselskapet Partnair konkurs".
- Norwegian News Agency (7 June 1993). "Friere for luftfart".
- Norwegian News Agency (1 February 2000) "Flyselskapene tapte milliarder".
- Norwegian News Agency (8 may 2017). "Norwegian større enn SAS".
- Olsen, Claude Roland (18 August 1992) "Norway Airlines i politisk skvis" Dagens Næringsliv. p. 4
- Olsson, Matts (10 February 1994). "SAS lägger ner Sveriges äldsta flygbolag". Tidningarnas Telegrambyrå.
- Ottesen, Gregers; Segrov, Bjørn (16 January 1998). "Starter flyselskap". *Dagens Næringsliv*.
 p. 10.
- Ottesen, Gregers (16 March 1998). "Britisk selskap skal være operatør for Color Air".
 Dagens Næringsliv. p. 7.
- Phelan, Paul (12 March 2002). "Ansett's assets go on sale". Flight International. p. 25.
- Rapp, Ole Magnus (17 April 1998) "Braathens på teppet hos LO: Fjern forhenget i flyene straks" *Nordlys*, p. 5
- Rapp, Ole Magnus (7 June 1998) "Turister ville ikke sitte i Braathens Back-seter" *Aftenposten*, p. 6
- Rapp, Ole Magnus (17 July 2002). "NAS henter overflødige fagfolk fra Braathens". *Aftenposten.* p. 4.
- Ringerikes Blad (26 February 2010). "Kjos kjøper Diamanten".
- Sæthre, Lars N. (17 June 1997). "Til London for fem hundrelapper". *Aftenposten*. p. 41.
- Sæthre, Lars N. (12 March 1998). "Priskrig til glede for passasjerene: Kapasitetsboom på Gardermoen". *Aftenposten*. p. 46.
- Schiefloe, Ingrid (22 February 1997). "Braathens SAFE er byråfavoritten". *Dagens Næringsliv*. p. 34.
- Sedbon, Gilbert (24 January 1990). "UTA take-over makes Air France Europe's second-favourite airline". *Flight International*. p. 10.

- Sjöblom, Anita (13 June 1992). "Flyget slåss om Gotland. Linjeflyg och Transwede öppnar skytteltrafik och". *Dagens Nyheter*. p. 5.
- Snefjellå, Svein (28 November 1997) "SAS kjøper» *Nordlys*. p. 6.
- Spence, Thomas (1 August 1998). "Klart for flyet med lave priser". *Aftenposten*. p. 2.
- Steen, Knut B. (28 September 1999). "Til himmels på flyavvikling". *Dagens Næringsliv*. p.
 37.
- Stenseng, Sverre (19 April 1999). "Flyselskapene taper". *Dagens Næringsliv*. p. 27.
- Tårnås, Rita (18 April 1998) "Braathens nok en gang" *Nordlys*, p. 15
- Tuv, Kristen (19 December 1997). "Solgt for to kroner». *Dagens Næingsliv*. p. 17.
- Tuv, Kirsten (10 November 1999) "Dyr svenskelekse". Dagens Næingsliv. p. 19.
- Valderhaug, Rune (12 May 1992). "Braathens avviser fusjon med SAS". *Bergens Tidende*. p. 12.
- Valderhaug, Rune (20 January 1994). "Braathen vil ikke fly direkte Bergen Nord-Norge".
 Bergens Tidende. p. 6.
- Valderhaug, Rune (5 April 1994). "Startskudd for frislepp i luften". *Bergens Tidende*. p. 10.
- Valderhaug, Rune (28 October 1994). "Ny flyrute gir priskrig på Bergen–London". Bergens
 Tidende. p. 6.
- Valderhaug, Rune (24 February 1995). "Slåss om store flykunder". Bergens Tidende. p. 11.
- Valderhaug, Rune (2 September 1999). "SAS vil ha færre avganger Bergen Oslo". *Bergens Tidende*. p. 9.
- Valderhaug, Rune (7 September 1999). "Braathens vil ikke kutte flyruter". Bergens Tidende.
 p. 2.
- Valestrand, Terje (19 January 1998). "Color Air: Ingen politisk sak". Bergens Tidende p. 6.
- Vasdal, Dag R. (8 June 2005). "Teddy Air i krise". *Varden*.
- Vassbø, Tone (19 June 1991). "Sterling går inn i Norway Airlines". *Dagens Næringsliv*. p.
 28.
- Vestmo, Bjarne (27 April 2000). "Trafikken på Værnes tilbake til fortiden". *Adresseavisen*.
 p. 19.
- Verdens Gang (20 April 1998) "Si det i VG"
- *Verdens Gang* (30 April 1998) "Si det i VG"
- *Verdens Gang* (5 April 2003) "Slutt for Arctic Air". p. 52.

Reports

- Braathens SAFE (1994) *Årsberetning* 1993
- Braathens SAFE (1995) Årsberetning 1994
- Braathens SAFE (1996) Årsberetning 1995
- Braathens SAFE (1997) *Årsrapport 1996*
- Braathens (1998) *Braathens* årsrapport 1997
- Braathens (1999a) *Årsberetning* 1998
- Braathens (1999b) *Foreløpig Regnskap* 1998
- Braathens (2000) Braathens årsberetning 1999
- Braathens (2001) Årsrapport 2000
- Norwegian Competition Authority (2001) SAS' erverv av 68,8 prosent av aksjene i
 Braathens ASA konkurranseloven § 3-11 avgjørelse om ikke å gripe inn (V2001-21).
 Bergen. Available at http://www.konkurransetilsynet.no/globalassets/vedtak-og-uttalelser/vedtak-og-avgjorelser/2001/a2001-21.pdf accessed 25 October 2016.
- Norwegian Competition Authority (2002) Konkurranseloven § 3-10 inngrep mot SAS',
 Widerøes og Braathens' bonusprogrammer, EuroBonus og Wings (V2002-22). Bergen.
 Available at http://www.konkurransetilsynet.no/globalassets/vedtak-og-uttalelser/vedtak-og-avgjorelser/2002/v2002-22 sas bonusprogrammer inngrep.pdf accessed 25 October 2016.
- Norwegian Tax Administration (2016) Avgiftshistorie. Oslo. Available at
 http://www.skatteetaten.no/globalassets/saravgifter/avgiftshistorie/avgiftshistorie-2016.pdf
 Accessed 27 October 2016.
- Norges Offentlige Utredninger (NOU 1982: 21) Sivile og militære flyruter. Oslo: Ministry of Defence. 14 May 1982.
- Norges Offentlige Utredninger (NOU 1988: 31) *Sivil luftfart: organisasjon, styring og tilsyn*. Oslo: Ministry of Transport and Communications. 18 October 1988.
- Scandinavian Airlines System (1993) Annual Report 1992
- Scandinavian Airlines System (1994) Annual Report 1993
- Scandinavian Airlines System (1995) Annual Report 1994
- Scandinavian Airlines System (1996) Annual Report 1995
- Scandinavian Airlines System (1997) Annual Report 1996
- Scandinavian Airlines System (1998) *Annual Report 1997*
- Scandinavian Airlines System (1999) Annual Report 1998

- Scandinavian Airlines System (2000) *Annual Report 1999*
- Scandinavian Airlines System (2001) *Annual Report 2000*
- Scandinavian Airlines System (2001) Annual Report 2001
- Scandinavian Airlines System (2005) The SAS Group Annual Report & Sustainability Report 2004
- Scandinavian Airlines System (2008) SAS Group Annual Report & Sustainability Report
 2007
- St. meld. nr. 26 1986–87 *Om flyrutekonsesjoner*. Oslo: Ministry of Transport and Communications
- St. meld. nr. 47 1991–92 *Norsk luftfartsplan 1993*–97. Oslo: Ministry of Transport and Communications
- St. prp. nr. 1 1998–99 *Skatte-*, *avgifts- og tollvedtak*. Oslo: Ministry of Finance and Customs
- St. prp. nr. 69 1992–93 *Om rammevilkåra for luftfartselskapenes virksomhet*. Oslo: Ministry of Transport and Communications

Online

- Airbus (2016) "Orders, Deliveries, Operators Worldwide" as of 30th September 2016.
 XLS-file available at http://www.airbus.com/company/market/orders-deliveries/?
 eID=maglisting push&tx maglisting pi1%5BdocID%5D=111061. Accessed 27 October 2016.
- Airfleets (2017) "Boeing 737 Next Gen Active with SAS". Available at
 http://www.airfleets.net/flottecie/SAS-active-b737ng.htm. Accessed 10 May 2017.
- AirportsinEurope (2017) "Largest airlines Europe".
 https://www.airportsineurope.com/flight-info/largest-airlines-europe/. Accessed 10 May 2017.
- Avinor (2000) "Trafikkstatistikk Passasjerer 1999". Available at
 https://avinor.no/globalassets/ konsern/om-oss/statistikk/no/1999/passasjerer-1999.pdf.
 Accessed 23 November 2016.
- Boeing (2016) "737 Model Summary Through September 2016". Available at http://active.boeing.com/commercial/orders/displaystandardreport.cfm?
 cboCurrentModel=737&optReportType=AllModels&cboAllModel=737&ViewReportF=View+Report, accessed 27 October 2016.

- Color Air (10 March 1999) "Color Air Ruteplan Sommer/Høst 1999". Accessed on 4
 November 2016 at the Wayback Machine at
 https://web.archive.org/web/19990427083152/http://www.colorair.no/flytider.htm
- Eurostat (2017) "Air transport of passengers" [ttr00012]. Available at
 http://ec.europa.eu/eurostat/web/transport/data/main-tables. Accessed on 4 May 2017.
- Sando, Thomas (20 January 2015) "Er ICA en «fallittbedrift»?". Available at
 http://naeringsjuss.blogg.no/1421741216 er ica er en fallittb.html. Accessed on 7 April

 2017.

Appendices

Appendix A: Low-cost criteria

The following criteria are often cited as a criteria for a low-cost carrier. Few such airlines actually meet all of them, and these are often known as ultra low-cost carriers. Most airlines made trade-offs; although mot of the criteria lower costs, they also create disadvantages which may make it less favorable for passengers to fly with the carrier.

- 1. A unified fleet, in which the airline operates only a single model of aircraft, and often only a single size. This reduces crew and maintenance training costs and reduces the complexity of assigning aircraft to routes. In effect, any aircraft can fly any route with any crew.
- 2. Only offering point-to-point flights and thereby not permitting connecting flights. This means that the airline forgoes revenue from non-direct flights. Flight connects can be expensive, including baggage handling and compensation in case of missed connections.
- 3. Interlining involves arrangements of passengers being allowed to check through on multiple airlines. The main cost is tied to IT systems having to be interconnected and can often increase the airline's IT costs noticeably.
- 4. Alliances are expensive to operate due to coordination of routes, codesharing, interlining and expensive frequent-flyer programs, all which requires coordination. This has increasingly become a watershed for separating low-cost from network carriers, especially in the West.
- 5. Initially low-cost carriers used call centers and supermarkets to sell tickets, later switching to online-only sales. Network carriers instead relied on travel agencies and their own sales offices, typically located downtown and at airports. Although by no means free, new sales channels are much cheaper to operate than the commissions offered to travel agencies.
- 6. Lean management is a rather fuzzy term, but refers to organizational structures in which there is a low administrative overhead in relation to the airline's size.
- 7. Frills are complimentary services offered on board, such as coffee, snacks, newspapers and in-seat entertainment systems. During regulation they were often provided as part of promoting the airline's service. Frills constitute small costs, but their lack with low-cost

- carriers was quite noticeable for passengers. No-frill services has often been hyped, especially by the press, as one of the major distinguishing factors between low-cost and network carriers, although their actual cost saving is negligible. Often the savings are more due to the reduction of turn-around time than the cost of the frills themselves.
- 8. Price differentiation is the process of selling the same seats for different prices depending on when the tickets are sold, and which flight is chosen. Conventionally tickets were sold for the same price no matter what. This allows for a trade-off between flexibility and price, allowing the airline to sell more tickets to the leisure market while retaining high prices to the business segment.
- 9. Frequent-flyer programs are expensive to operate, but can allow airlines to create more loyal customers. It is most effective when targeting frequent fliers who let their employers pay for travel.
- 10. Leisure routes are services operated to destinations which for the most part attract holiday-makers. This can include Mediterranean resorts and city holidays. Such routes can be flown infrequently, often only once or twice a week, and can fly at otherwise irregular times, such as in the middle of the day and during weekends, periods when planes would otherwise idle for lack of business passengers.
- 11. Outsourcing is the process of subcontracting certain parts of operations to a third party.

 Low-cost carriers are often able to press down their costs through aggressive outsourcing, especially of ground handling, maintenance and aircraft leasing. Some even outsource flight crews.
- 12. Secondary airports are those which supplement a primary airport serving a city. These are commonly closed-down military bases on which a primitive terminal building has been built. These airports are often desperate to attract business and undercut primary airports, often surviving on the sale of duty-free and parking to passengers rather than fees from the airlines. They are shunned by network airlines, as they are commonly inconveniently located with poor connectivity.
- 13. Low-cost carriers normally operate only a limited number of bases. They also consistently land all aircraft and crews at bases for the night. This avoids the costly practice of overnighting crews at hotels. Network carriers are forced into overnight in order to operate efficient hubs, which require passengers to be fed in as early in the morning as feasible.

The following table shows how Braathens, SAS, Color Air and Norwegian fare in relation to these criteria. "Yes" denotes that they meet the low-cost criteria, while "no" denotes that they do not. Sometimes airlines have been situated between the two criteria. Especially for Norwegian, they have since their inception moved away from a low-cost to a hybrid model. These shifts are denoted with an asterisk (*).

	Braathens	SAS	Color Air	Norwegian
Unified fleet	Yes*	No	Yes	Yes
Point-to-point	Partially	No	Yes	Yes*
No interlining	No	No	Yes	Yes
No alliance	No	No	Yes	Yes
Tlf / Internet sales	No	No	Yes	Yes
Lean mgmt	Yes	No	Yes	Yes
No frills	No	No	Yes	Yes
Price diff.	Partially	Partially	Yes	Yes
No bonus card	No	No	Yes	Yes*
Leisure routes	Partially	No	Yes	Yes*
Outsourcing	No	No	Yes	Yes
Secondary airport	No	No	No	No
Bases	Yes	No	Yes	Yes

Appendix B: Passenger and financial statistics

This appendix presents select passenger and financial metrics for Braathens SAFE, and to a less extent SAS, between 1992 and 2001. All information is gathered from the respective annual repors. Passenger statistics have been published for each market, such as Norwegian domestic, Swedish domestic and international. This allows these figures to be compared between the companies. Financial information is only available for the airlines as a whole, and therefore only the statistics for Braathens are included. There are a few discrepancies from year to year, which give a few holes in the data.³³⁹

Legend		Measured in
BU	Braathens (SAFE)	
SAS	Scandinavian Airlines System	
Nor	Norway domestic	
Swe	Sweden domestic	
intl	International	
Pax	Number of revenue passengers	Thousands
RPK	Revenue passenger kilometers	Thousands
ASK	Available seat kilometers	Thousands
LF	Load factor (portion of seats sold)	Percent
Yield	Passenger traffic income per seat kilometer	NOK
	Other financial values	NOK thousands
Aircraft-h / day	Average aircraft utilization per day	Hours : minutes

³³⁹ Braathens SAFE (1994): 22; Braathens SAFE (1995): 24; Braathens SAFE (1996): 22; Braathens SAFE (1997): 32; Braathens (1998): 32; Braathens (1999): 40; Braathens (2000): 42; Braathens (2001): 39; Scandinavian Airlines System (SAS) (1993): 28; SAS (1994): 32; SAS (1995): 6; SAS (1997): 8; SAS (1998): 23; SAS (1999): 29; SAS (2000): 29; SAS (2001): 36; SAS (2002): 41

The following table compares key passenger statistics for Braathens SAFE and SAS in the domestic Norwegian market.

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
BU										
Pax	3642	3821	4162	4458	4846	4989	5104	5286	5264	
RPK	1336	1405	1565	1747	1953	1948	2008	2145	2194	
ASK	2305	2415	2824	3187	3410	3363	3585	4125	3955	
LF	57.9	58.2	55.4	54.8	57.3	57.9	56.8	52.0	55.5	
SAS										
Pax				3014	3379	3476	3607	3802	3850	3839
RPK	1377	1575	1648	1606	1756	1827	1911	1960	1977	1962
ASK				2615	2965	2993	3049	3698	3466	3300
LF	66.4	67.0	63.8	61.4	59.2	61.0	62.7	53.0	57.0	59.5

The following is a table of the most central performance metrics for Braathens from 1992 through 2000.

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Revenue traffic	2440	2563	2781	3093	3466	4295	5071	5503	5639
Revenue total	3339	3415	3692	4047	4472	5401	6383	6661	6741
Profits (loss)	-55	-7	153	205	88	214	-23	-612	133
LF Nor	57.9	58.2	55.4	54.8	57.3	57.9	56.8	52.0	55.5
LF Swe					51.6	52.5	49.1	56.3	61.6
LF intl	37.4	39.6	47.9	54.3	55.0	52.8	53.0	47.6	50.0
Yield Nor	1.72	1.70	1.65	1.60	1.52	1.71	1.78	1.55	1.77
Yield Swe					1.64	1.52	1.71	1.86	2.36
Yield intl	1.62	1.33	1.17	0.98	1.24	1.32	1.30	0.98	0.86
Op. costs / ASK	0.78	0.77	0.72	0.73	0.76	0.79	0.91	0.91	0.94
Aircraft-h / day	5:46	5:45	6:09	6:26	6:33	6:33	6:18	5:55	5:42
Pax / man-year	1456	1507	1602	1606	1670	1696	1557	1487	1544
Pax Nor	3642	3821	4162	4458	4846	4989	5104	5286	5264
Pax Swe					236	765	991	1338	789
Pax intl	137	173	202	268	317	439	558	821	759
Pax charter	377	304	265	258	262	318	320	238	259