
by

Filippos Servitopoulos

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THE US AIRLINE DEREGULATION AND ITS EFFECTS ON INDUSTRY STRUCTURE AND COMPETITION. HOW MUCH DID THEY AFFECT THE RANGE, NATURE AND FREQUENCY OF AIRLINE SERVICES

FILIPPOS SERVITOPOULOS
MBA

September 2001
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FILIPPOS SERVITOPOULOS
MBA

A Dissertation submitted in part fulfilment of the requirements for the award of the Masters Degree in Business Administration.
To my mother,

Alexandra Servitopoulos
Acknowledgements

I wish to express my gratitude to Mr John Penlington, my supervisor, who guided me and provided assistance when needed. His profound academic knowledge and keen interest helped me in completing my dissertation.

Thanks also to the faculty of Caledonia’s Business School and my colleagues, for their co-operation and assistance and most of all for making my postgraduate studies so enjoyable.

Above all, I would like to thank my parents from the bottom of my heart, for motivating me in pursuing an MBA degree and always being there for me in their own ways. Their effort proved to be worthwhile. A big proportion of the success belongs to them.
Abstract

The purpose of this dissertation is to assess whether the consumers are receiving a greater range and more frequent airline services since the U.S. airline industry was deregulated. Are the consumers better off since deregulation? Are the airlines providing more and better services?

The questions mentioned above are examined and answered in this dissertation and based on the literature available and on numerous reports and published papers, many conclusions are drawn. These conclusions can help the readers in both comprehending the complicated issue of airline deregulation and assessing whether consumers are better off since deregulation.

Initially an analysis of the airline deregulation is carried out based on the literature available. Information is provided regarding when did it happen and why did it happen. Moreover a comparison of the pre and post-deregulation era is conducted. Information is also provided about the airline deregulation effects on the U.S. airline industry’s structure and competition. Strategic alliances which constitute a consequence of the airline deregulation effects are also examined.

After the description of both the effects of airline deregulation and strategic alliances is carried out, an analysis of them is initiated. The analysis is aiming at proving whether airline deregulation has increased the range and frequency of airline services. For this analysis, the information presented before is used and it is analysed via the use of certain management models.

Through a thorough research and study on the above issues, It has become apparent to me that the opinions about the range and frequency of services offered to the customers before and after deregulation are contradictory. The
conclusions that I have made are based on my own perception on those issues and are a result of an objective analysis of contradicting theories and opinions. The airline deregulation issue is very opportune in the U.S. because the airline industry is currently undergoing through a very crucial stage. Many are those who praise the airline deregulation decision, taken in the late 1970s but many are those who recollect the days of the pre-deregulation period. My own ideas are expressed throughout this thesis in a way that they allow the reader to form his/her own opinion on the issue.
Contents

Acknowledgements i
Abstract ii

Overview of the Structure 10

Chapter One – Introduction 11
1.1 – Aim and objectives of the thesis 12
1.2 - Methodology 12
   1.2.1 – Research Design 13
   1.2.2 – Data Collection 14

Chapter Two – Review of Literature 16
2.1 – Introduction 17
2.2 – The U.S. airline industry. A historical background 17
2.3 – The Pre-Deregulation era, the Civil Aeronautics Board and its role 18
2.4 - The Post-Deregulation Era and the Airline Deregulation Act 19

Chapter Three – The Airline Deregulation effect on the U.S. airline industry 23
3.1 – Introduction 24
3.2 – The Airline Deregulations effect on the airline industry’s structure 24
   3.2.1 – The Hub and Spokes system 24
   3.2.2 – The ‘No-Frills’ airlines 25
   3.2.3 – The Regional Jet 28
3.3 – The Airline Deregulation effect on competition 29
3.4 – Strategic Alliances: A definition 30
<table>
<thead>
<tr>
<th>Chapter Four – Theoretical Frameworks</th>
<th>32</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 – Introduction</td>
<td>33</td>
</tr>
<tr>
<td>4.2 – The Bowman’s Strategy Clock</td>
<td>33</td>
</tr>
<tr>
<td>4.3 – The Competing Values Framework (CVF)</td>
<td>34</td>
</tr>
<tr>
<td>4.4 – Porters Five Forces Model</td>
<td>35</td>
</tr>
<tr>
<td>4.5 – Summary of the Literature Review</td>
<td>36</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter Five – An analysis of airline strategies, airline cultures and of the Airline Deregulations effect on industry structure</th>
<th>38</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 – Introduction</td>
<td>39</td>
</tr>
<tr>
<td>5.2 – An analysis of the airline strategies</td>
<td>39</td>
</tr>
<tr>
<td>5.2.1 – Conclusion</td>
<td>41</td>
</tr>
<tr>
<td>5.3 – An analysis of airline cultures</td>
<td>42</td>
</tr>
<tr>
<td>5.3.1 – Conclusion</td>
<td>43</td>
</tr>
<tr>
<td>5.4 – An analysis of the effect on the U.S. airline industry’s structure</td>
<td>43</td>
</tr>
<tr>
<td>5.4.1 – The Hub and Spokes Route system</td>
<td>43</td>
</tr>
<tr>
<td>5.4.1.1 – Conclusion</td>
<td>46</td>
</tr>
<tr>
<td>5.4.2 – The ‘No-Frills’ carriers</td>
<td>47</td>
</tr>
<tr>
<td>5.4.2.1 – Conclusion</td>
<td>48</td>
</tr>
<tr>
<td>5.4.3 – The Regional Jet</td>
<td>48</td>
</tr>
<tr>
<td>5.4.3.1 – Conclusion</td>
<td>49</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter Six – An analysis of the Airline Deregulations effect on competition</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 – Porters Five Forces Analysis</td>
<td>51</td>
</tr>
<tr>
<td>6.1.1 – Conclusion</td>
<td>62</td>
</tr>
<tr>
<td>6.2 – An analysis of the Strategic Alliances</td>
<td>62</td>
</tr>
<tr>
<td>6.2.1 – The reasons for their formation</td>
<td>65</td>
</tr>
<tr>
<td>6.2.2 – Their impact on airline services</td>
<td>66</td>
</tr>
</tbody>
</table>
Chapter Seven – Final Conclusion

7.1 – Final Conclusion

References

Appendices

Appendix 1:  Deregulation by the numbers. A quick summary of airline deregulation benefits

Appendix 2:  Hosted airlines in airline hubs in 1979 and in 1998

Appendix 3:  U.S. Air Carrier Aircraft Departures, Enplaned Revenue Passengers and Enplaned Revenue Tons

Appendix 4:  Percentage of Domestic Air Carrier Slots held by selected groups in 1986, 1991 and in 1996

Appendix 5:  Global Alliance’s member airlines
List of Graphs

Graph 5.2.1.1 The Bowman’s Strategy Clock 31
Graph 5.3.1.1 The Competing Values Framework (CVF) 33
Graph 5.4.2.1 U.S. Air carrier Accidents and Fatalities
Versus U.S. Aircraft Miles Flown 48
Graph 6.1.1 Porters Five Forces Model 51

List of Tables

Table 2.4.1. Share of total passenger traffic (scheduled and non-scheduled) carried by U.S. airlines 1978-1989 21
Table 2.4.2. Number of U.S. airlines and aircraft operated in the U.S.A and American airlines operating revenues 1960-1977. 22
Table 3.2.2.1 Southwest Financial, Profitability and Growth Ratios 26
Table 3.4.1 Airline Alliance’s 1994-1996 31
Table 5.4.1.1 Percent Enplanements of Dominant Carriers at major hubs 45
Table 5.4.1.2 Major U.S. Air carrier Delays, Cancellations and Diversions 46
Table 6.1.2 Expansion / Consolidation of Pre-Deregulation Certificated Major Carriers 61
Table 6.2.2.1 Major Global Alliances at a glance 67
Overview of the Structure

This study begins with the Review of Literature which is presented in chapters Two, Three and Four. In Chapter Two, substantial information on the airline industry in both the pre and post-deregulation era is provided. In the next chapter, the airline deregulation effects on both the airline industry’s structure and competition are described. A consequence of those effects, the formation of strategic alliances, is also examined. Chapter Four is focused on the theoretical frameworks used in analysing the information presented in the previous chapters. In Chapters Five and Six an analysis of the information presented earlier can be found. The analysis is directed towards assessing whether airline deregulation has increased the range and frequency of services offered. Finally in Chapter Seven, the final conclusion is presented.
Chapter One – Introduction

1.1 – Aims and objectives of the thesis
1.2 – Methodology
    1.2.1 – Research Design
    1.2.2 – Data Collection
Chapter One - Introduction

1.1 - Aim and objectives of the thesis

The aim of the thesis is to examine whether and to what extent did the airline deregulation affect the range and frequency of airline services provided. In order to achieve this aim, certain objectives must be met. Those objectives are:

1. To make the reader aware of the environment in which airlines operated in both the pre and post-deregulation era. This will help him/her to better understand the deregulation effects, which will be analysed in Chapters Five and Six.

2. To inform the reader about the airline deregulation effects and their consequence of strategic alliances. This is necessary before proceeding to the analysis of the effects. The reader must know what exactly is the issue that will be analysed.

3. To examine how much did each effect, affected the range and frequency of services. After studying and understanding each effect, the reader will be able to comprehend the analysis of each effect in the context of the pre and post-deregulation eras, for which information is provided prior to the analysis.

4. To make a conclusion based on the individual conclusions presented after the analysis of each deregulation effect. The final conclusion will state whether the range and frequency of services were improved after the airline deregulation occurred.

1.2 – Methodology

The methodology used in writing this thesis is divided in two sections: The research design and the data collection section.
1.2.1 – Research design

The overall research is divided into three smaller research areas. The first research is focused on the airline industry in the pre and post deregulation era. The purpose of this research is to make the reader familiar with the state of the U.S. airline industry in both eras. Providing a brief description of the airline industry’s early stages firstly does this. The research findings are presented in an unbiased way, without any analysis in order to avoid a subjective perception of the issues to be analysed on behalf of the readers.

The second research is involved with the Airline Deregulation effects. The purpose of this research is to describe the issues, which’s analysis leads to the aim of the thesis. Due to the fact that the Airline Deregulation’s effects are numerous, two of them are chosen and described. These are the effect on the industry’s structure and the effect on competition. This description is complemented by a comparison of certain issues in the context of the state of the airline industry in the pre and post deregulation era. The strategic alliances which are a consequence of the effect on competition, are explained since they influence the range and frequency of services offered.

The third research that is conducted is on the impact that the Airline Deregulation’s effects had on the services provided. Each of the effects, including the strategic alliances, are analysed so that their relation to the services provided is identified. The analysis of these effects is based on the use of certain management models that are analysed in Chapter Four. The conclusion of each effects analysis is presented. The final conclusion is a summary of those individual conclusions.

The thesis is mainly divided into two parts. The descriptive and the analysis part. This structure has been chosen due to the fact that the readers must be aware of the issues to be examined before they are examined. The information that is needed to complete each of the analysis presented in Chapters Five and Six is included in Chapters Two, and Three. The ‘tools’ adopted for the
analysis are explained in Chapter Four. This prevents the danger of the reader being ‘lost’ while reading the thesis because of the vast information in the text.

The analysis via the use of the management models was chosen because the use and credibility of such models is well known and therefore the danger of using obsolete or inappropriate models, which would jeopardise the validity of the overall research, is surpassed.

1.2.2 – Data Collection

For writing this dissertation both quantitative and qualitative data will be used. The qualitative data will be derived from academic books on airline deregulation, airline policies and strategies. Books referring to strategic analysis and research methods will also be addressed to. In order to be more precise and opportune, I will also collect qualitative data from articles and published papers that can be found via the Internet. The benefit of using such material is that they are up-to-date and they are referring to current important issues.

Quantitative data will also be used in order to both stress certain points and to support some of my findings on several issues which will be examined. Statistics related to airlines, aircraft operation etc, in both the pre and post-deregulation era, will be presented. Some graphs will also be presented so as to illustrate and make more comprehensible certain aspects of my research.

For this thesis mainly secondary data ahhs been used. This includes books, journals, articles and published papers. The use of secondary data has both advantages and disadvantages.

An important advantage is that the data collected is already proved and accessible to others and therefore there is no need to prove this data. Another advantage of secondary data is that you need less time to collect than primary data. This leaves more time to the researcher to analyse this data and draw some conclusions.
A major drawback of secondary data is that it might not be exactly what the writer is looking for. It might be inappropriate to the research questions. Combining secondary and primary data can surpass this limitation.

The secondary data must be always analysed by constantly considering the purpose of the research. The data may have been published to serve another purpose so the researcher should be able to use the same data in order to achieve his/her purpose which might be different than the original purpose for which the data was collected.

Before analysing secondary data, the researcher should bare in mind some of the disadvantages mentioned above. If and when, the researcher manages to manipulate the research so as to serve his/her purpose, then he/she has succeeded in his/her research.
Chapter Two – The Review of Literature

2.1 - Introduction
2.2 - The U.S. airline industry – A historical background
2.3 - The Pre-Deregulation era, the Civil Aeronautics Board and its role
2.4 - The Airline Deregulation Act and the Post-Deregulation era
Chapter Two - Review of Literature

2.1 - Introduction

The study of airline services in the pre and post-deregulation era begins with an examination of the airline industry in both periods. This examination is based on certain books, which refer to the pre and post-deregulation eras. The core books used for this examination are the ‘Air Transportation – A management Perspective’ by Wells, A. and “Air Transport - A Marketing Perspective” by Shaw, S. Moreover, several articles and papers were referred to, which can be found at the reference section of this thesis.

After the studying of both periods, the airline deregulation effects on both the American airline industry and competition are reviewed. The review is based on three books which are: the “Global Airlines – Competition in a trans-national industry” by Hanlon, P. the “Airline Industry and the impact of deregulation” by Williams, G. and the “Airline Deregulation – The Early Experience” by Meyer, J. A few articles were referred to for the study of the effects because they contained more updated information of the effects than the books contained, especially for certain effects and consequences of airline deregulation such as: the introduction of the Regional Jet and the formation of the Strategic Alliances which have been occurred in the last decade.

Using certain management models carries out the analysis of the Airline Deregulation effects. These models will analyse the information available and will lead to the conclusion. An explanation of this models as well as a study on their purpose, attributes and limitations can be found at the end of this chapter. These models were found in two books. These are the “Exploring Corporate Strategy” by Johnson, J. and the “Organizational Behaviour” by Buchanan, J.

2.2 - The U.S. Airline Industry - A historical background

The American airline industry is perceived to be a well organised and a very efficient industry, which underwent numerous changes during the 90 years of its existence due to both internal and external factors that were changing. Its
origins can be traced back to January 1914 when the first scheduled flight took place between Tampa Bay and St Petersburg.

In May 1918 the American Post Office Department realised the benefits of air transport and in co-operation with the American War Department has launched the first regular air mail route in the United States between New York City and Washington DC. The following years many airmail routes were added from time to time and several others were discontinued when they proved to be unnecessary. In the next decade, the development of the domestic airmail service in the United States had progressed to such a point that the feasibility of regular service had been adequately demonstrated. The infrastructure needed for regular service had been established and various bodies were discussing the launching of the first regular service. This occurred in 1927, when an aeroplane called the Lockheed Vega made its first flight, starting in this way the age of fast, comfortable travel that people could enjoy. (Wells, 1989)

2.3 - The Pre-Deregulation era, the Civil Aeronautics Board (CAB) and its role

From the early years of its existence and for the next fifty years, every aspect of the American airline industry was planned, regulated and controlled by the Civil Aeronautics Board (CAB). The CAB was a five-member committee established under the Civil Aeronautics Act in 1938 and continued by the Federal Aviation Act of 1958. (Wells, 1989)

The CAB regulated the civil air transport industry within the United States and between the United States and foreign countries in the interests of the public and the airlines. Within this framework the Board issued licences to provide air transportation service, approved or disapproved proposed rates and fares, and approved or disapproved proposed agreements and corporate relationships involving carriers. The CAB regulated the airline industry out of concern that carriers, left to their own devices, would compete so intensely that they would set fares too low to generate the profits needed to re-invest in new equipment and other capital. As Stephen Shaw stated, the regulation duty of the CAB was “an attempt by the US government to ensure that certain objectives were met
which might not be met under the operation of free market forces”. \textit{(Shaw, 1982)}

In the pre-deregulation era, airlines were operating inefficiently and according to expensive, unnecessary management practices but were free to offset this cost by raising the fares. The threat of bankruptcy did not exist since it was the government’s duty to financially support the carriers when needed. U.S. airline managers were mainly focusing on pleasing the regulators, whose support was essential, instead of the consumers who were enjoying limited but high standard services.

The first priority of the pre-deregulation era airline managers, was to serve the public and to offer services to all the Americans regardless their place of residence. Airlines in the pre-deregulation era, were serving a humanitarian cause. Airline managers in the post-deregulation era are focusing more on the profit generation side of the business than on the humanitarian aspect of it and a proof of that is the discontinuation of non-lucrative airline services from certain communities which’s inhabitants are obliged to depend on other means of transportation such as trains and busses.

\textbf{2.4 - The Airline Deregulation Act and the Post-Deregulation era.}

On October 24, 1978 the Congress decided the enactment of the Airline Deregulation Act, which was followed in 1979 by the International Air Transportation Competition Act. Both Acts reduced the CABs regulatory powers gradually until its abolition, when its remaining functions were transferred to other agencies such as the Federal Aviation Authority (FAA), the Civil Aviation Authority (CAA), and the Department of Transportation (DOT). \textit{(Wells, 1989)}

The Deregulation Act was intended to ensure that market entry, pricing and route structure were subject to market controls in an effort to promote competition. The Act phased out the government’s control of fares and service but did not change the government’s role in regulating air safety. \textit{(Wells, 1989)}
The Airline Deregulation Act faced some opposition, which supported the notion that the reliance on competitive market forces to determine the price, quantity and quality of domestic air service could affect safety and harm the economies of smaller communities. Despite the opposition the Airline Deregulation Act formed the basis on which the current airline industry would be transformed.

The Act aimed in eliminating the existing regulations which limited pricing freedom and product differentiation, restricted capacity growth, prevented the airlines from providing the services required by their customers and excluded new entrants. By relaxing those regulations, a more competitive environment would be created which would provide considerable benefits to the consumers, such as: lower fares, innovative pricing and greater product differentiation.

The Airline Deregulation Act, applied to both the domestic and international aspects of the airline industry. On the domestic sector the results were quickly visible: The number of carriers offering scheduled domestic services on busy routes rose from 36 in 1978 to over 120 by 1985. According to the same source, by 1985, the top five carriers accounted for 57 per cent of the US industry’s output compared with 69 per cent in 1978. *(Bureau of Transportation Statistics, Department of Transportation)*

The deregulation succeeded in increasing the market share that US carriers had internationally. US carriers operated more efficiently and by liberalising the international air transport, and by forming several bilateral agreements and open-skies policies with many foreign countries, the US government managed to increase their U.S.-European market share to 49.2 per cent by 1988 as opposed to the 43.9 per cent they had in 1977. In table 2.4.1 the increase of the share of total passenger traffic, (scheduled and charter) carried by US airlines, in two major markets, can be viewed.
Table 2.4.1  Share of Total Passenger Traffic (scheduled and charter), carried by U.S. airlines 1978-1989

<table>
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<tr>
<th>Years</th>
<th>US airlines' share in each market area</th>
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<tr>
<td></td>
<td>US-</td>
</tr>
<tr>
<td></td>
<td>Europe</td>
</tr>
<tr>
<td>1978</td>
<td>43.9</td>
</tr>
<tr>
<td>1979</td>
<td>44.6</td>
</tr>
<tr>
<td>1980</td>
<td>42.9</td>
</tr>
<tr>
<td>1981</td>
<td>41.0</td>
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<tr>
<td>1982</td>
<td>44.9</td>
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<td>1983</td>
<td>46.5</td>
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<tr>
<td>1984</td>
<td>47.2</td>
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<td>1985</td>
<td>47.2</td>
</tr>
<tr>
<td>1986</td>
<td>43.0</td>
</tr>
<tr>
<td>1987</td>
<td>46.6</td>
</tr>
<tr>
<td>1988</td>
<td>49.2</td>
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</tbody>
</table>

Source: US International Air Travel Statistics, US Department of Transportation

The airline Deregulation Act has undoubtedly caused the enlargement of the U.S. airline industry, (See Appendix 1). More airlines and services were launched and more people were able to fly. According to the American Bureau of Transportation Statistics, in 1998, 588,355,318 passengers were boarded at all U.S. airports. In 1988, 420,326,215 passengers were boarded and in 1980, 303,345,221 passengers were boarded almost half of those boarded in 1998. (Bureau of Transportation Statistics)

The dramatic expansion of the U.S. airline industry, in terms of airlines and aircraft operated and also in terms of revenue generated by the U.S. airlines in both domestic and international markets can be verified by an observation of the figures in table 2.4.2.
Table 2.4.2  Number of airlines, aircraft operated in the US, and US Airlines Operating Revenues 1960-1997

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<tr>
<td><strong>Active Air Carriers</strong></td>
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<tr>
<td>Total turbojet aircraft</td>
<td>720</td>
<td>2.136</td>
<td>2.526</td>
<td>4.148</td>
<td>5.093</td>
</tr>
<tr>
<td>Total turboprop aircraft</td>
<td>312</td>
<td>374</td>
<td>682</td>
<td>1.595</td>
<td>2.167</td>
</tr>
<tr>
<td>Total Carriers (Major, National and Regional)</td>
<td>55</td>
<td>39</td>
<td>132</td>
<td>118</td>
<td>164</td>
</tr>
<tr>
<td>Domestic Operating revenues (.000 dollars)</td>
<td>2.178.339</td>
<td>7.180.161</td>
<td>26.440.297</td>
<td>57.980.508</td>
<td>82.249.568</td>
</tr>
<tr>
<td>International Operating revenues (.000 dollars)</td>
<td>705.938</td>
<td>2.109.497</td>
<td>6.442.144</td>
<td>17.990.355</td>
<td>27.318.034</td>
</tr>
</tbody>
</table>

Note: Data on Regional and National carriers in 1960 and 1970 were unavailable

Source: U.S. Department of Transportation, Bureau of Transportation Statistics

In the post deregulation era, airline managers were adopting different strategies in order to cope with the new free market forces. Airlines had to gain and increase their marketing share by following successful strategies. The airline market was characterised by fierce competition and the absence of federal inflows. Airlines were struggling to achieve a competitive advantage, which would strengthen their position in the market. U.S. airline managers started studying their markets and they were trying to predict the changes in the customer’s desires and expectations. The governmental control mechanisms have been eliminated and therefore the airlines were free to offer new, more and better services in order to attract more customers.