

# New

Now available from Ashgate Publishing...



# Introduction to Air Transport Economics

## From Theory to Applications

**Bijan Vasigh, Ken Fleming and Tom Tacker**, all at Embry-Riddle Aeronautical University

*"This is a landmark textbook in airline economics as, for the first time, disparate information from various economic disciplines is integrated with key institutional factors that affect the industry. Basic material is presented in an easy-to-read and understand format with plenty of real-world situations."*

—Darryl Jenkins, Ohio State Airline Operations Center

*"This book represents a thorough and comprehensive coverage of the key topics in aviation economics... This book also treats excellently the current policy and strategic issues facing policy makers, airlines, airports and other professionals in aviation. This is a rare book that combines both theory and applications in a very meaningful way."*

—Tae H. Oum, Air Transport Research Society (ATRS) and University of British Columbia

*Introduction to Air Transport Economics* uniquely merges the institutional and technical aspects of the aviation industry with their theoretical economic underpinnings. In one comprehensive textbook it applies economic theory to all aspects of the aviation industry, bringing together the numerous and informative articles and institutional developments that have characterized the field of airline economics in the last two decades. It will be of great relevance to undergraduate and graduate students interested in obtaining a more complete understanding of the economics of the aviation industry. It will also appeal to many professionals who seek an accessible and practical explanation of the underlying economic forces that shape the industry.

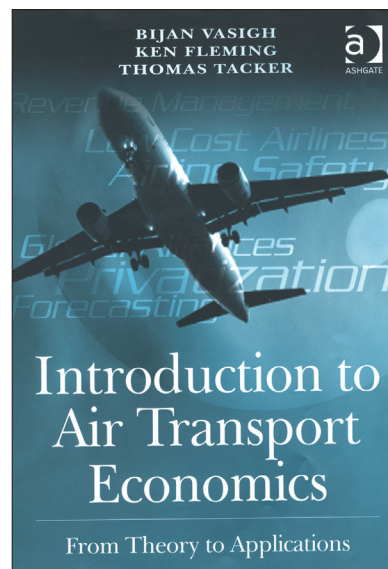
August 2008	382 pages	
Hardback	978-0-7546-7079-7	\$124.95
Paperback	978-0-7546-7081-0	\$39.95

All online orders at [www.ashgate.com](http://www.ashgate.com) receive a discount

### Key Points

- Applies economic theory to all areas of the aviation industry.
- Merges institutional and technical aspects of the aviation industry with their theoretical economic underpinnings.
- Presents an easy-to-read and understand format that is accessible to undergraduates with little or no previous exposure to aviation economics, while still suitable for graduate students.

**Contents:** Preface; The evolving air transport industry; Principles of economics; Market demand analysis and demand and supply for airline services; Cost and production analysis: the general concepts; Aviation infrastructure: operations and ownership; International economics and aviation; International aviation: open skies and global alliances; Market structure and monopolistic markets; Hybrid market structure and the aviation industry, hybrid market structure; Aviation forecasting and regression analysis; Pricing policy and revenue management; Low cost, start-up airlines: a new paradigm; The economics of aviation safety and security; Index.



Please visit [www.ashgate.com](http://www.ashgate.com) for sample pages

## ASHGATE

Ashgate Publishing  
PO Box 2225  
Williston VT 05495-2225 USA  
Toll-free: 1-800-535-9544  
Email: [orders@ashgate.com](mailto:orders@ashgate.com)  
Web: [www.ashgate.com](http://www.ashgate.com)

[www.ashgate.com](http://www.ashgate.com)

# New Introduction to Air Transport Economics

"...Introduction to Air Transport Economics offers valuable insight into how the fundamentals of economics apply to aviation...covers a broad range of topics from underlying passenger demand to aviation infrastructure. It offers an overview into the dynamic industry environment while using practical industry applications to explain general economic concepts—a great introduction to the world of aviation and explanation for what keeps airlines in the air."

—Zane Rowe, Continental Airlines

"...critical as a resource for our future students...the authors provide clear insight to show how it is economics that drives the successful airlines to adhere to the highest standards of safety and security. I believe that this book will be used by faculties and students, worldwide, in their effort to understand, and then manage, the activities of the aviation industry."

—Irwin Price, Dubai Aerospace Enterprise University

"Dr. Vasigh has produced a detailed introduction to the subject of airline economics, covering both the theory and its application to the modern air transportation industry. Students and those already engaged in the industry will find this an illuminating guide to an ever more complex business."

—Barry Humphreys, Virgin Atlantic Airways

"Introduction to Air Transport Economics: From Theory to Application provides a comprehensive treatment of the economics of the commercial air transport industry. Written in easy-to-read, jargon-free English... the book will be beneficial to those seeking a deeper understanding of the workings of the major players in the air transport industry, including airlines, airports and aircraft manufacturers...can be read as a stand alone text by undergraduates and graduate students with limited backgrounds in economics. Those students with a deeper understanding of economics, at the intermediate level or higher, can read quickly through the principles chapters and delve directly into the airline applications."

—Martin Dresner, University of Maryland

## Sample Pages

### 2 Principles of Economics

Economics is haunted by more fallacies than any other study known to man. This is no accident. The inherent difficulties of the subject would be great enough in any case, but they are multiplied a thousand fold by a factor that is insignificant in, say, physics, mathematics, or medicine—the special pleading of selfish interests.

Henry Hazlitt

This chapter introduces the "economic way of thinking," primarily through the study of supply/demand and the logic of prices. The example of price controls illustrates how mistaken causal analysis can be and that any calculation of costs must consider opportunity costs, such as waiting in line when artificially low prices create shortages. The chapter also demonstrates how prices efficiently allocate resources and motivate appropriate behavior in the framework of Adam Smith's "Invisible Hand." A similar analysis shows how low landing fees can actually impose greater costs on airlines as the concept of external costs is incorporated. A short section on public choice explains how government policy can sometimes go awry through interest influence, and bureaucratic topics:

- Fundamentals of economic
- The economic way of thinking
  - Demand
  - Supply
  - Equilibrium
  - Changes in equilibrium
  - How equilibrium price
  - Price controls
  - Airport landing fees
- The economics of government
  - Incentives for a vol
  - Laissez-faire
  - Bureaucratic inefficiency
  - Government failure
  - Reforming government

168 INTRODUCTION TO AIR TRANSPORT ECONOMICS

**Table 7.1 Global alliance membership, 2006**

airline	Member	Start			
Aer Lingus <sup>1</sup>	June 00	Aerflin	07 Apr	Air Canada	May 97
American Airlines	Sept 98	American	June 00	Air New Zealand	Mar 99
British Airways	Sept 98	Air France/KLM	June 00	All Nippon Airways	Oct 99
Cathay Pacific	Sept 98	Alitalia	07 Jul	Asiana Airlines	05 Mar
Delta	Sept 99	Continental Airlines	07 Sep	Australian Airlines	Mar 00
Egypt	Sept 99	Czech Airlines	07 Mar	Iran	Jul 00
LAN	June 00	Delta Air Lines	June 00	LOT Polish Airlines	05 Oct
Qantas	Sept 98	Korean Air	June 00	Lufthansa	May 97
Qatar Airways	05 Jan	Northwest Airlines	07 Sep	SAS Scandinavian Airlines	May 97
Malaysia Airlines	05 Jan	China Southern Airlines	05 Jan	Singapore Airlines	Apr 00
Japan Airlines	05 Jan	Air Europa	07 Jan	South African Airways	05 Apr
		Copa	07 Jan	Spanair	05 Apr
		KLM	07 Jan	Swire	05 Apr
		TAP	07 Jan	TAP Portugal	05 Mar
		Middle East Airlines	07 Jan	Thai Airways	May 97
		TACA	07 Jan	United Airlines	May 97
		USA	07 Jan	US Airways	Oct 97
				Vang	Oct 97
				Air China	05 Jan
				Shanghai Airlines	05 Jan
				Blue	05 Nov
				Adria Airways	07 Dec
				Orion Air	07 Dec

286 INTRODUCTION TO AIR TRANSPORT ECONOMICS

**Figure 11.4 Demand curve**

In practice there are a number of ways in which a business can institute at least some form of price discrimination. However, in order for it to be successful, three necessary conditions need to apply to the market:

- market segmentation
- different elasticities in different submarkets
- market separation.

The first requirement for price discrimination is that there should be different segments of the market. In the airline industry, these segments are business travelers, leisure travelers, and students. Business travelers are more price insensitive than leisure travelers and students. To satisfy their demand for travel, airlines may also be able to charge different prices. In the airline industry, this is done through the use of different fares.

346 INTRODUCTION TO AIR TRANSPORT ECONOMICS

**Accidents and Fatalities by Phase of Flight**

**Figure 13.7 Worldwide commercial accidents and fatalities, 1996-2005, categorized by phase of flight**

Source: Compiled by the author using IATA data.

Note: CFIT = controlled flight into or toward terrain; LOC = loss of control, either enroute or on the ground; SCF = serious cockpit failure or malfunctions other than power loss or nonrecognition; DUE = deliberate error; OUE = other or unknown; SEET = serious passenger evacuation, either by cabin, aircraft, people, or airside.

**Figure 13.8 Hull losses per million departures by regions, 1996-2006**

Source: Compiled by the author using IATA data.

Please visit [www.ashgate.com](http://www.ashgate.com) for sample pages

Ashgate Publishing  
PO Box 2225  
Williston VT 05495-2225 USA  
Toll-free: 1-800-535-9544  
Email: [orders@ashgate.com](mailto:orders@ashgate.com)  
Web: [www.ashgate.com](http://www.ashgate.com)

**ASHGATE**

[www.ashgate.com](http://www.ashgate.com)