



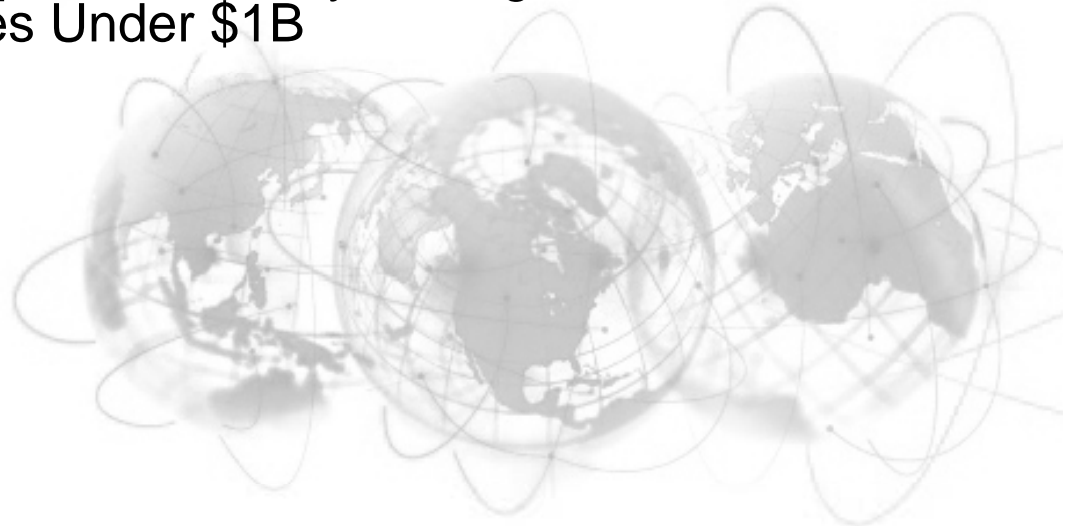
Aviation Industry Suppliers Conference

Tier 2 Consolidation

Forecast of Merger and Acquisition Activity among
Aviation Suppliers with Sales Under \$1B

William H. Alderman
President

Los Angeles,
March 20, 2002



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Agenda

- **Micro Economic Drivers**
 - Wealth maximization
- **Macro Economic Drivers**
 - Maturing of Industry
 - Business Cycles
 - Liquidity
- **Alderman & Company Tier 2 M&A forecast**
 - 2002-2003



Micro Economic Drivers



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Micro Economic Drivers

Buyers buy and sellers sell to maximize shareholder value

- » Sellers sell when they perceive future value to be lower than current value
- » Buyers buy when they perceive future value to be greater than current value



Micro Economic Drivers

Some acquisitions just transfer value: $2+2 = 4$

- Transfer of value to Buyer
 - Sale price is too low (< 2)
 - Buyer gets great price
 - Seller sells to low
- Transfer of value to Seller
 - Purchase price too high (> 2)
 - Buyer overpays
 - Seller gets a great price

**A simple transfer of value has no impact
on the competitive landscape**

Micro Economic Drivers

Other acquisitions create value: $2 + 2 > 4$

- Price can be low for buyer and high for seller through the creation of “Synergies”
 - Revenue enhancement
 - Cost take-outs

A transforming merger can have a dramatic impact on the competitive landscape

Micro Economic Drivers

Synergies: “Comparable” price *can* be misleading Boeing Acquisition of Jeppesen 2000

2000 Purchase Price	1,500,000,000
1999 Total Revenue	235,000,000
Revenue Multiple	6.38
1999 Operating Income*	61,100,000
Operating Income Multiple	24.55

The issue is value – not comparable price

**Estimated based upon Boeing press release: “Operating Margin in excess of 25%”, 26% used here.*

Macro Economic Drivers



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Macro Economic Drivers

1. Maturing of the Industry

- Constant driver of consolidation

2. Business Cycle

- Variable driver
- Corporate profits impact rate of M&A activity

3. Liquidity

- Variable driver
- Availability of financing impacts rate of M&A activity



1. Maturing of the Industry



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Macro Economic Drivers

Evolution of Commercial Aviation

- 1903 Wright Flyer makes the first successful manned and powered flight.
- 1927 Charles Lindbergh becomes first person to cross the Atlantic solo and nonstop
- 1935 DC-3 enters service (12,000 to be produced)
- 1937 Sir Frank Whittle in England and Hans von Ohain in Germany construct the first turbojet engines
- 1958 B707 enters service: START OF THE JET AGE
- 1970 B747 enters service: Dramatic reduction in cost/ASM
- 1974 A300 enters service: Further reduction in cost/ASM
- 1976 Concorde enters service



DC3



B707



B747



A300

Macro Economic Drivers

1950's-1980's: Golden Years of Commercial Aviation

- Development of a global consumer market
- Growth of intercontinental jet networks
- Advancements in airline technology and infrastructure
- Speed, comfort, and safety improvement
- Jet overtakes rail/marine as preferred mode of long-distance travel
- US Deregulation 1979



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Macro Economic Drivers

This was a high growth Industry

1950 – 1975: Massive levels of capital expended to build the world's commercial aviation network



DFW 1973



IAH 1969



IAD 1962



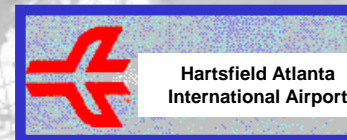
ORD 1962



PHL 1953 (main terminal)



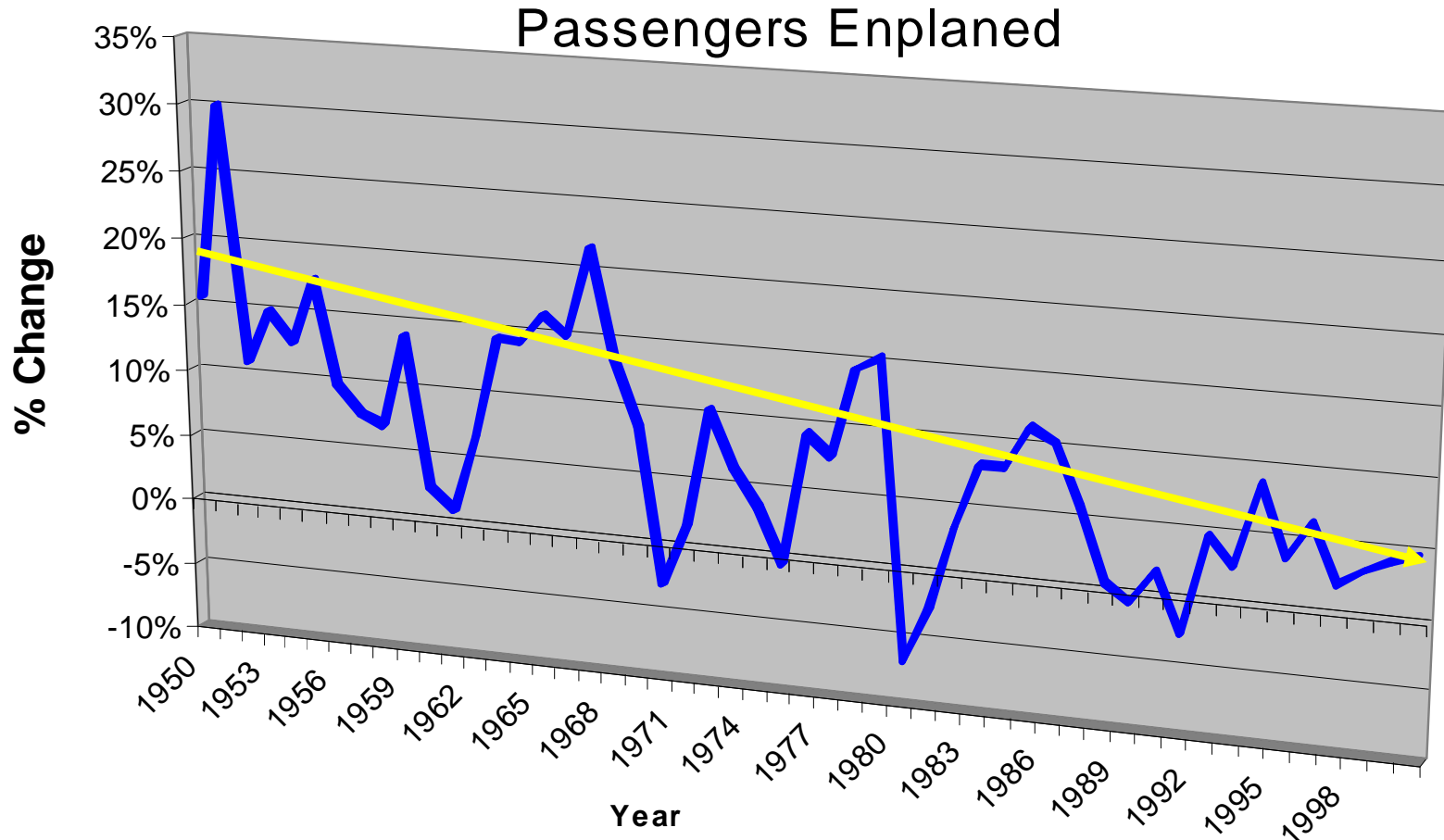
LHR 1955 (main terminal)



ATL 1961 ("Jet" terminal)

Macro Economic Drivers

But...the rate of growth began declining long ago



Source: Air Transport Association

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Macro Economic Drivers

“ ...as they mature, mass markets for high-value goods and services naturally evolve into oligopolies, in which fewer than 10 competitors dominate two-thirds or more of all business. This tendency, already evident in aircraft and automobiles in the 1980s, is now manifesting itself in banking and finance, in health care, and in retail businesses from restaurants and drugstores to supermarkets and hardware chains.” *Welcome to Revolutionary Times: Accounting for an Info-Mated World*, by David Pearce Snyder in **NETWORKS** June, 1999.

Macro Economic Drivers

Alderman & Company's signs of market maturity

1. Shift in purchase selection from product attribute to price
2. Commoditization of goods and services
3. Market saturation / excess supply
4. Customer sophistication
5. Decline in rate of growth
6. Pricing transparency
7. Aging workforce

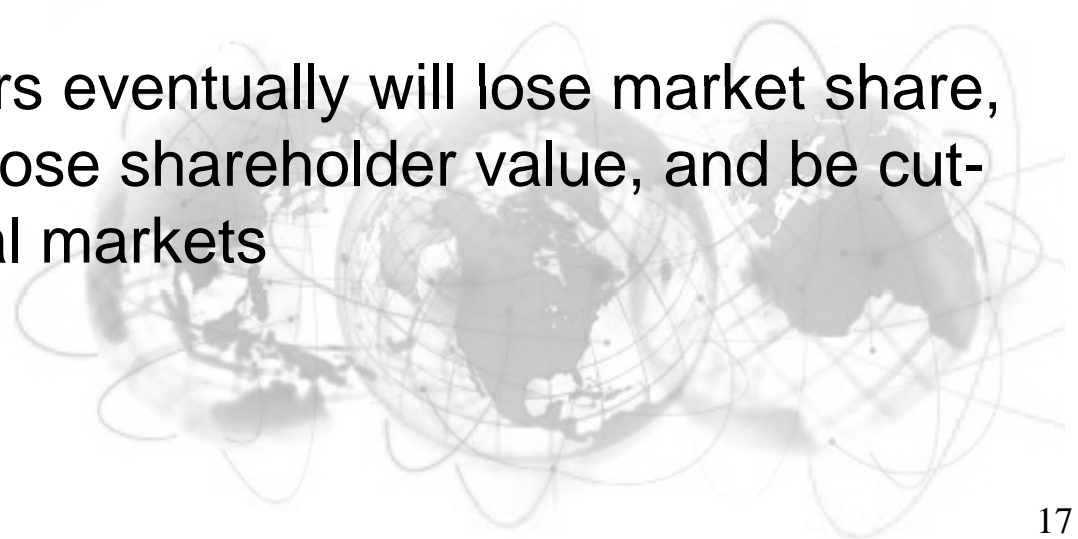


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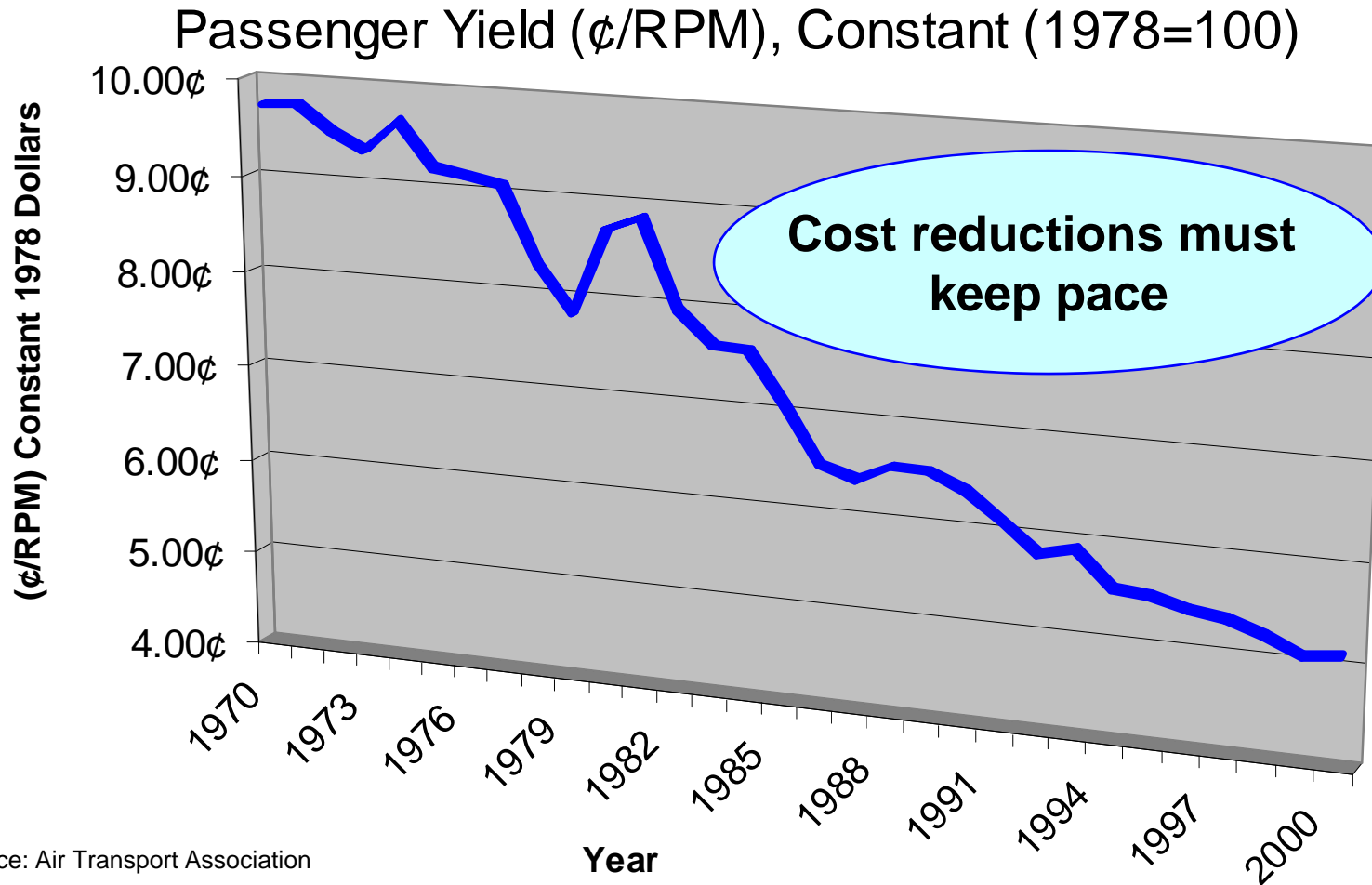
Macro Economic Drivers

Efficiency is the driver in a mature market

- The most efficient suppliers that meet the needs of the industry with acceptable quality will gain market share, generate profits, create shareholder value, and have access to the capital markets.
- Inefficient suppliers eventually will lose market share, generate losses, lose shareholder value, and be cut-off from the capital markets



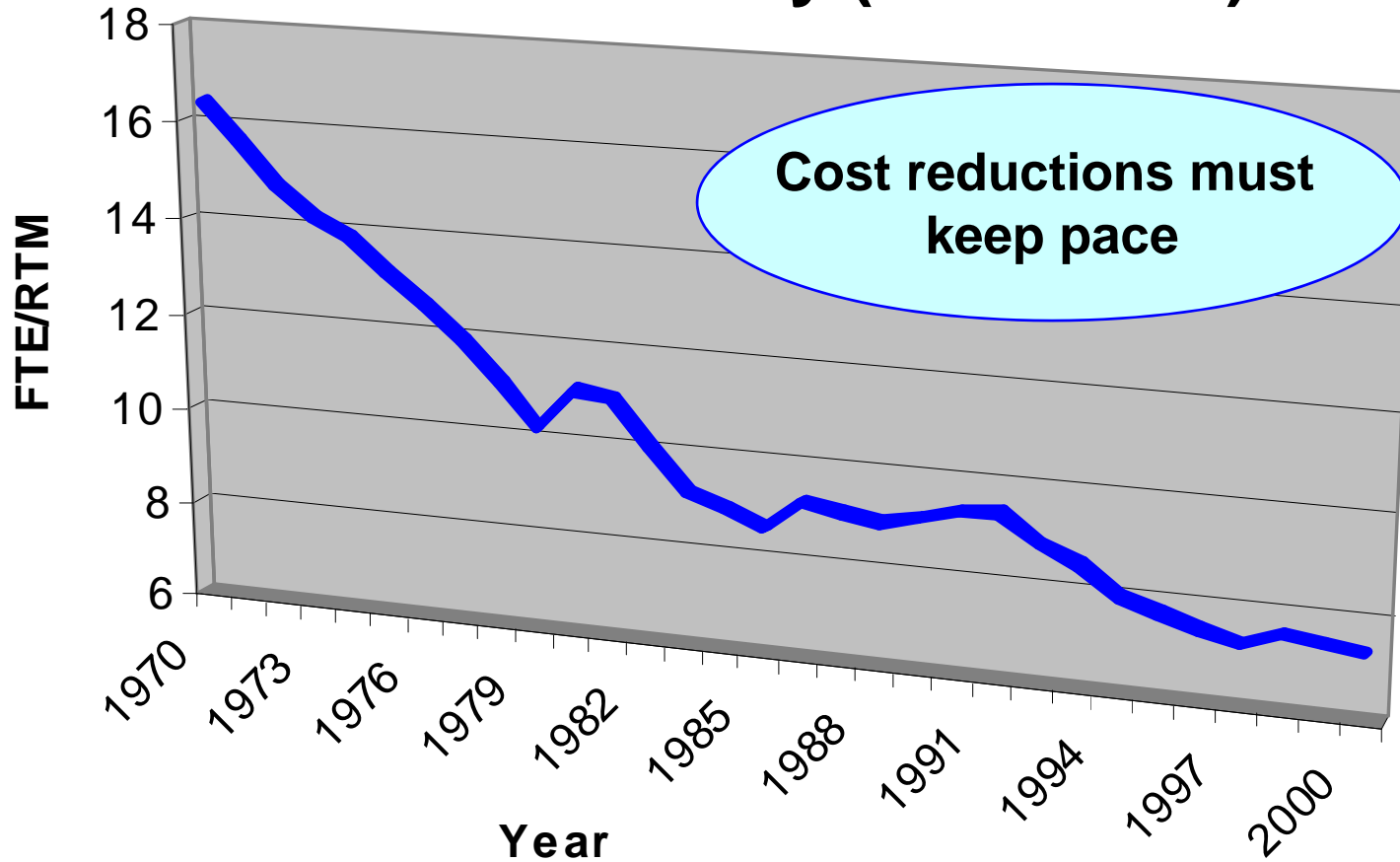
Macro Economic Drivers



Source: Air Transport Association

Macro Economic Drivers

Labor Efficiency (FTE/RTM)



Source: Air Transport Association

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Macro Economic Drivers

1990's: Industry becomes highly competitive

- Deregulation / free competition take hold
- Efficient airlines and suppliers win market share



southwest

- Inefficient airlines and suppliers forced to exit market

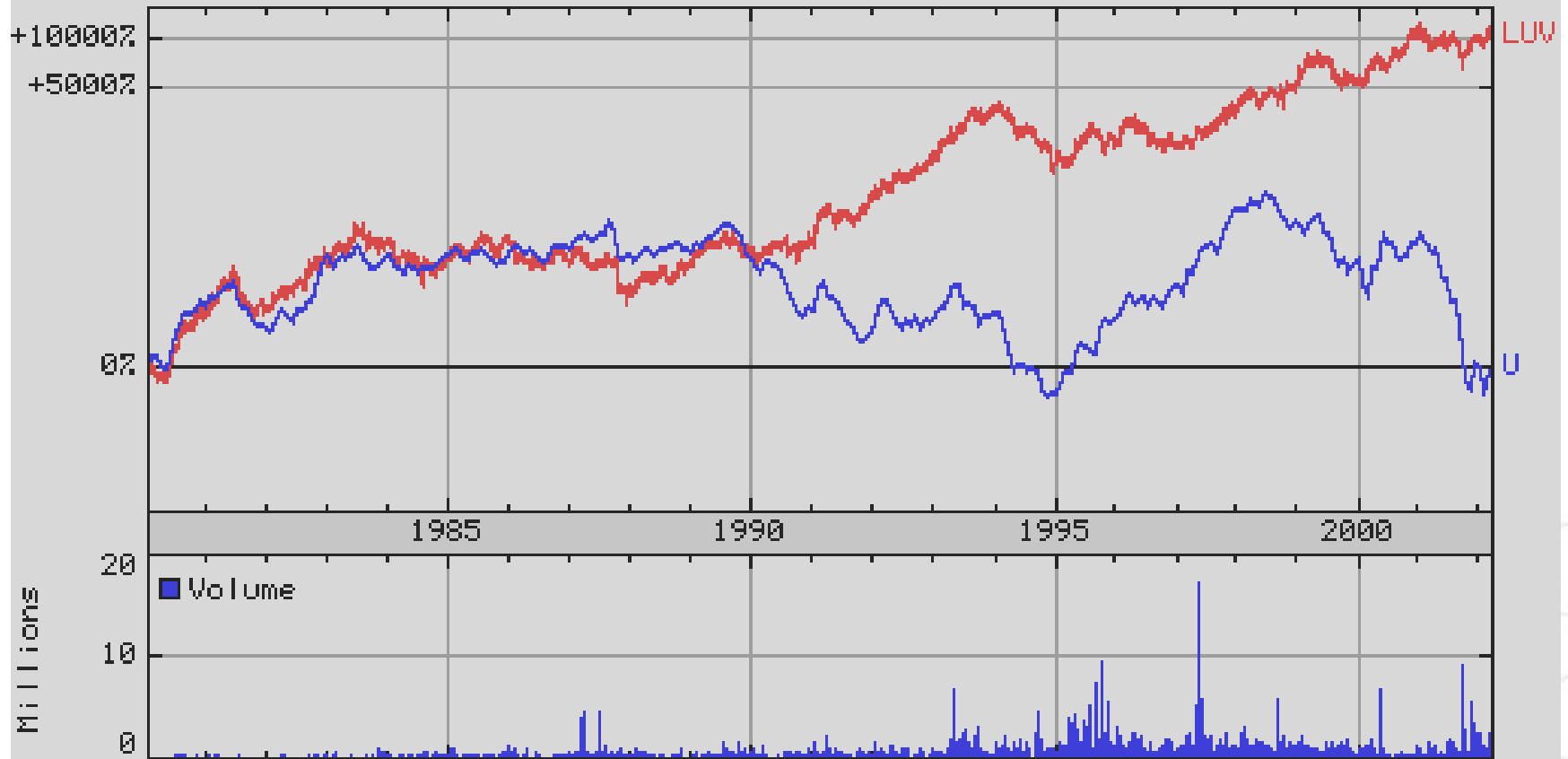


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Macro Economic Drivers

US Airways Group Inc
as of 13-Mar-2002

Southwest (LUV) vs. US Airways (U)

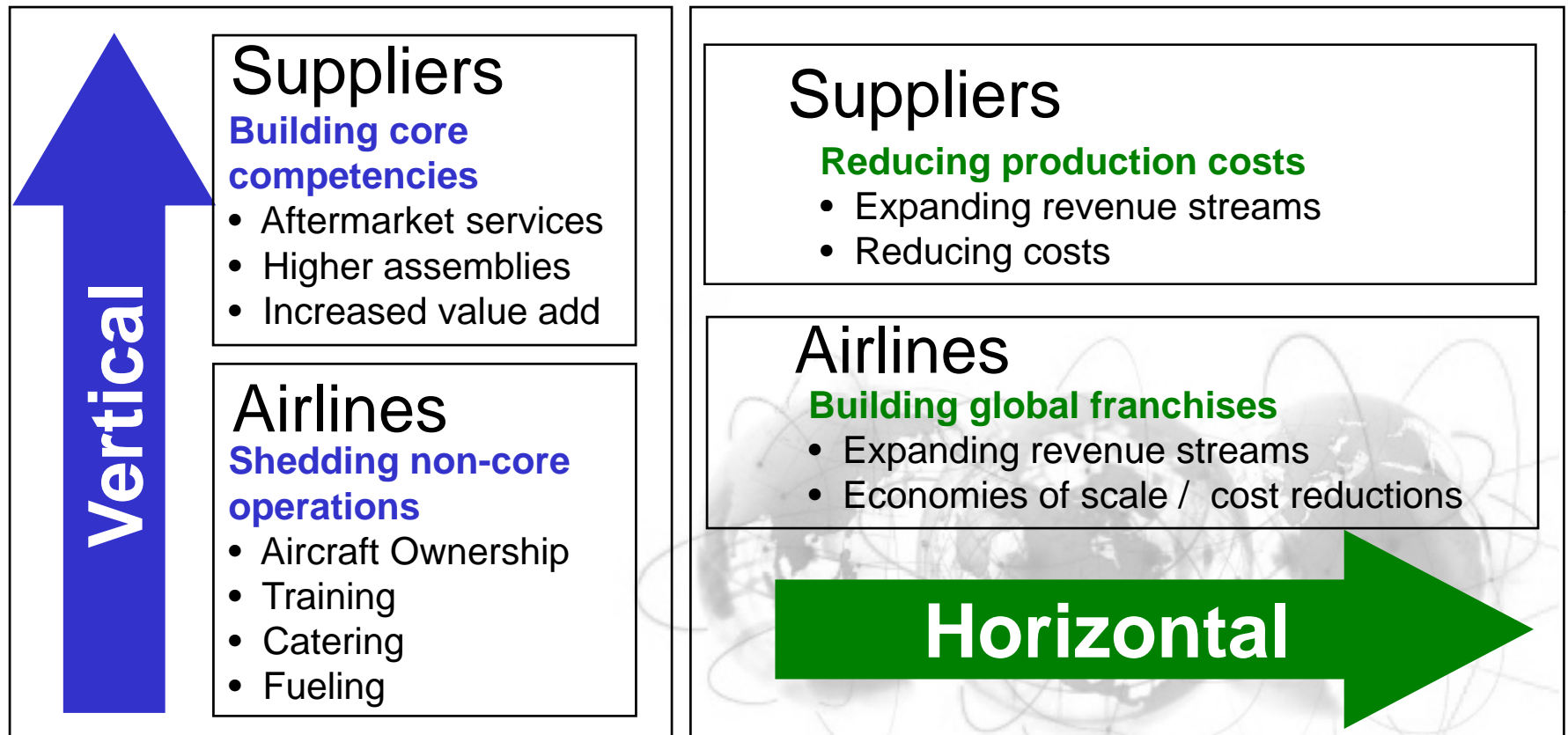


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Macro Economic Drivers

The Search for Efficiency: The Constant Driver to Consolidation



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Macro Economic Drivers

Vertical Acquisitions



Aug. 15, 2000 - Continuing the expansion of its services business, The Boeing Company (NYSE: BA) announced today that it has agreed to acquire Jeppesen Sanderson, Inc., the world's leading provider of flight information services, from Tribune Company... **"We've made it clear that we are transforming Boeing into a global aerospace solutions provider, and growing our aviation services business is a major part of that transformation,"** said Phil Condit, chairman and CEO of The Boeing Company...helps us to create value through our growing services business...Boeing is focused on providing additional services to its aviation customers...offer our customers creative solutions that add real value.

Source: Boeing Press Release

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Macro Economic Drivers

Vertical Acquisitions



United Technologies

CARIBE AVIATION, INC.

June 17, 2001 -- Hamilton Sundstrand has expanded its worldwide customer service capabilities with the acquisition last month of Caribe Aviation, an aircraft systems maintenance and repair operation near Miami, Florida. "The acquisition of Caribe provides us with the capability to service many components produced by other manufacturers," said Jim Peterson, vice president and general manager of customer service for Hamilton Sundstrand. Caribe's customers include Federal Express and Delta Air Lines. Peterson characterized the acquisition as **another step in the company's efforts to achieve comprehensive nose-to-tail aircraft service capabilities**. He added that Hamilton Sundstrand will continue to pursue other acquisition opportunities that would add value for customers.

Source: United Technologies Press Release

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Macro Economic Drivers

Horizontal Acquisitions



KRATZ-WILDE MACHINE COMPANY
APEX MANUFACTURING

September 7, 2000 -- Barnes Group Inc. (NYSE: B) announced today that it has completed the acquisition of substantially all of the assets of Kratz-Wilde Machine Company and Apex Manufacturing Inc...leaders in the production of intricate aerospace components utilized in jet engines and aircraft systems...further reinforces our position as a leader in the production of complex aerospace parts. We are also deepening our customer relationships in the fastest-growing segments of the jet engine market, such as regional jets," said Edmund M. Carpenter, president and chief executive officer of Barnes Group Inc. **"With the closing of this transaction, we have completed three strategic acquisitions in the past year...All of the acquired businesses will enhance our ability to create shareholder value over the long term."**

Source: Barnes Group Press Release

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Macro Economic Drivers

Divestitures



- TRW sale of Lucas/Aeronautical (in discussion)



- Goodrich sale of Engineered Industrial Products (pending)



- Rockwell Spin-off of Collins (June 2001)

Macro Economic Drivers

Sample Tier 2 Transactions

Vertical and horizontal mergers and acquisitions increase strategic competitive positioning

Date	Buyer	Acquired
Nov-01	B/E Aerospace, Inc.	M&M Aerospace Hardware, Inc.
Jul-01	BBA Group PLC [Signature Flight] (U.K.)	Ranger Aerospace Corp.
May-01	Tyco International Ltd. (Bermuda)	Scott Technologies, Inc.
May-01	TransDigm, Inc.	Champion Aviation Products
Dec-00	Kellstrom Industries, Inc.	Aviation Sales Co. [operations]
Nov-00	John Menzies PLC (U.K.)	Ogden Corp. [Aviation Services]
Aug-00	Henkel [Loctite Corp.] (Germany)	Dexter Corp. [Specialty Polymer Business]
Jul-00	Parker Hannifin Corp.	Wynn's International, Inc.
Mar-00	SPS Technologies, Inc.	Avibank Manufacturing, Inc.
Feb-00	L-3 Communications Corp.	Raytheon Co. [Flight Training]
Feb-00	United Technologies Corp. [Pratt & Whit.]	Cade Industries, Inc.
Jan-00	Precision Castparts Corp.	Wyman-Gordon Co.
Oct-99	TI Group PLC (U.K.)	Busak+Shamban (Germany)
Jul-99	Meggitt Holdings PLC (U.K.)	Whittaker Corp.
Jun-99	McKechnie PLC (U.K.)	Western Sky Industries, Inc.
Mar-99	Deutsche Lufthansa AG (Germany)	Hudson General Corp.
Jan-99	BBA Group PLC [Signature Flight] (U.K.)	AMR Combs
Oct-98	Special Metals Corp.	Inco Alloys International
Sep-98	Dunlop Standard Aerospace Group (U.K.)	BTR PLC [Aerospace Div.] (U.K.)
Sep-98	TI Group PLC (U.K.)	EIS Group PLC (U.K.)
Aug-98	Gulfstream Aerospace Corp.	K-C Aviation
Jul-98	Aviation Sales Co.	Whitehall Corp.
Apr-98	B/E Aerospace, Inc.	Aircraft Modular Products (AMP)
Feb-98	Mitel Corp. (Canada)	Plessey Semiconductors Ltd. (Canada)
Feb-98	Allegheny Teledyne, Inc. [Aerospace]	Sheffield Forgemasters Group [div.] (U.K.)
Feb-98	IFR Systems, Inc.	Marconi Instruments Ltd. (U.K.)
Feb-98	Zodiac S.A. (France)	MAG Aerospace Industries, Inc.
Jan-98	AlliedSignal, Inc. [Aerospace]	Banner Aerospace [operations]
Sep-97	Cytec Industries, Inc.	Fiberite, Inc.

2. Business Cycle



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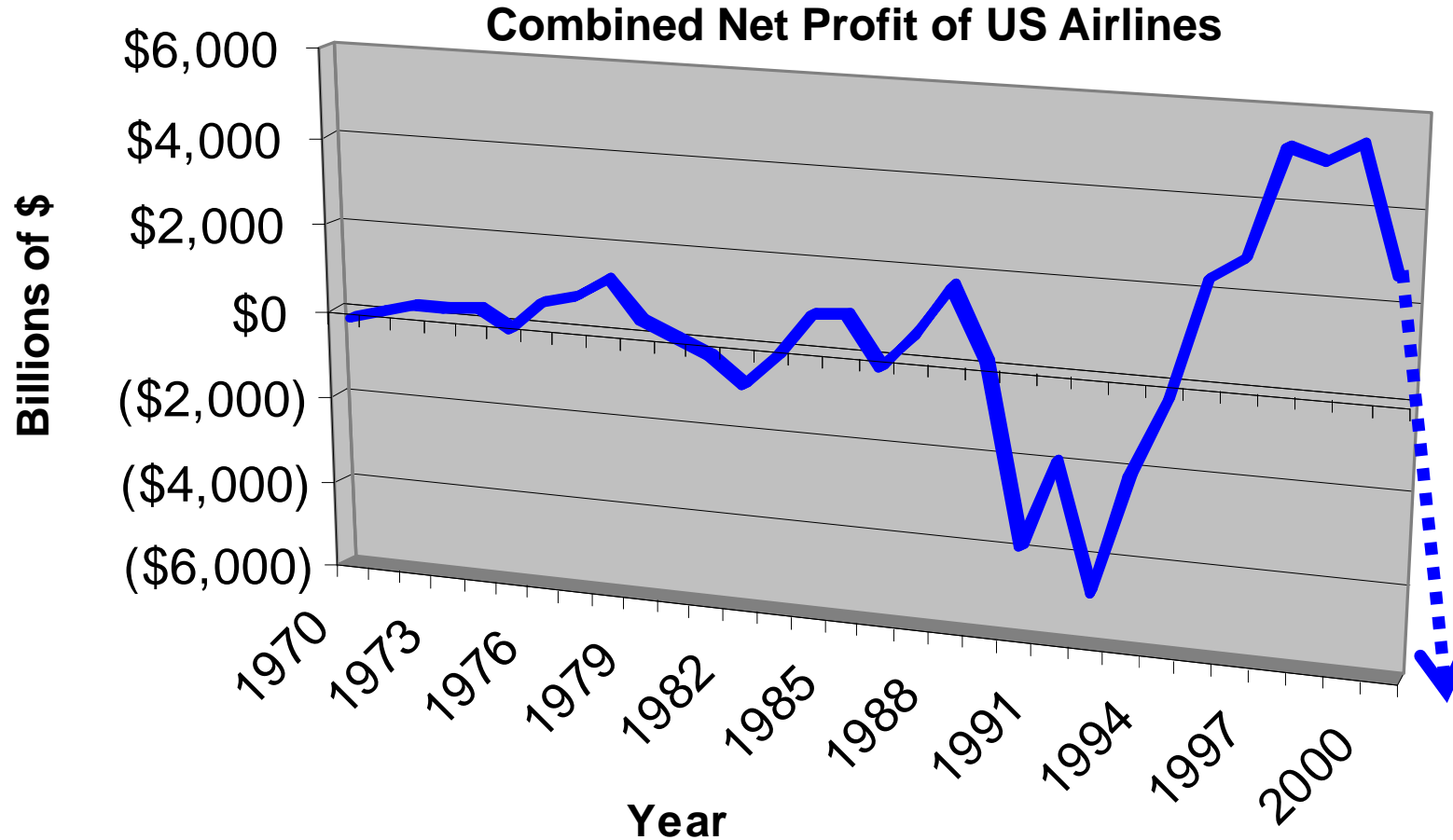
Business Cycle

- Prices paid for aviation companies are based on fundamental valuation models
 - Our industry does not use *'hits per page'* to value companies
 - Discounted Future Cash Flow is the standard methodology
 - Perception of future cash flow drives price
- Perception of future impacts price and M&A volume
 - Positive outlook = higher prices
 - Increases buyer bids
 - Increases likelihood of willing sellers
 - Negative outlook = lower prices
 - Decreases likelihood of willing sellers

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Macro Economic Drivers

Outlook has been dismal for the past 6 months



Source: Air Transport Association

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3. Liquidity



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Macro Macro Economic Drivers: Liquidity

Liquidity: *You can't buy it if you can't finance it*

- High liquidity raises prices and volume
 - Many can afford to buy
 - Bidding is aggressive
 - Prices rise
 - Sellers accept bids
- Low liquidity lowers prices and volume
 - Few can afford to buy
 - Bidding is restrained
 - Prices kept low
 - Sellers hold-out for higher prices in the future

Since 9/11 banks have been reluctant to finance our industry

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Tier 2 Consolidation Forecast 2002-2003



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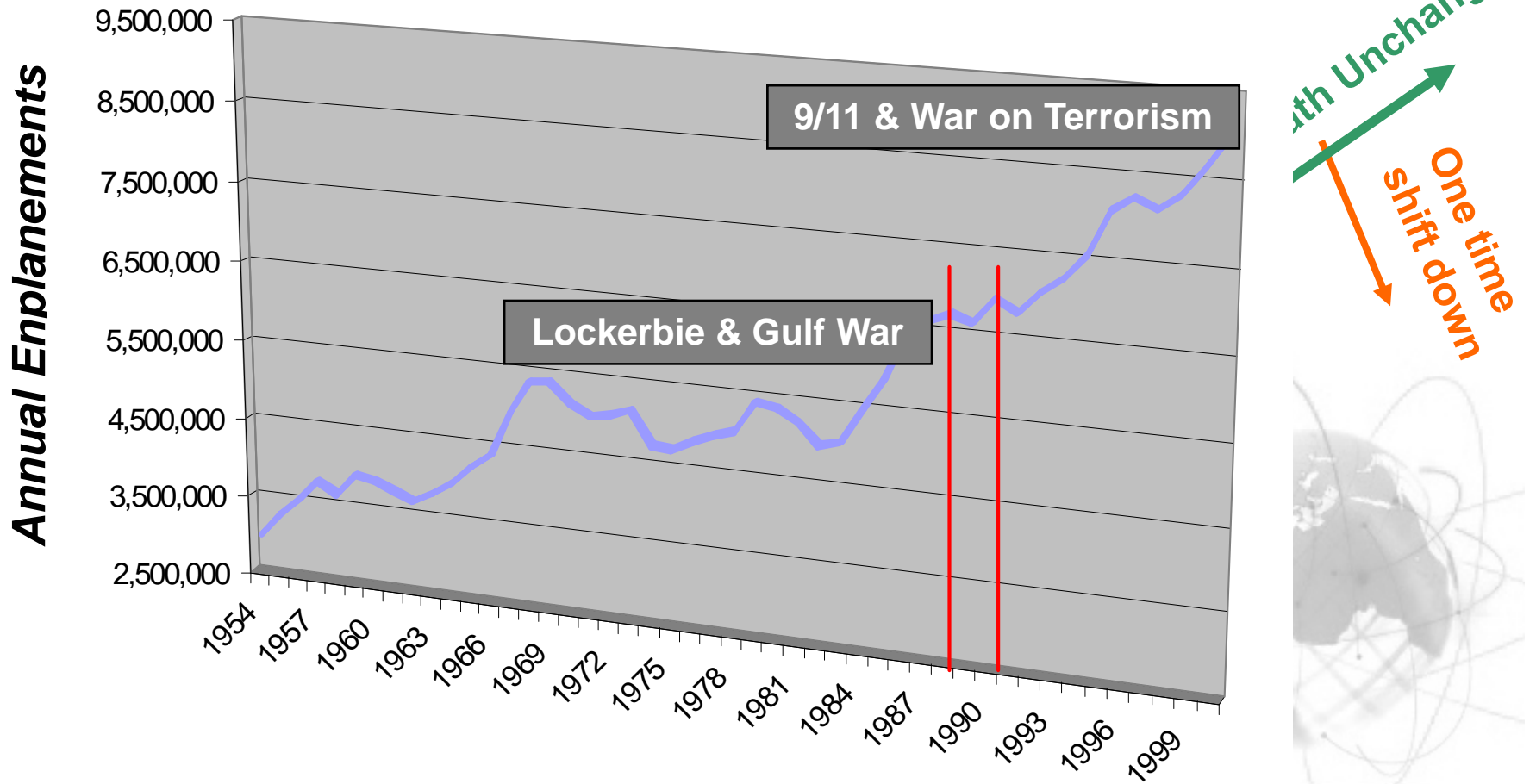
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Forecast 2002-2003

9/11 was devastating... but traffic will return



Source: Bureau of Transportation Statistics

Forecast 2002-2003

1. Traffic will continue to increase
 2. Airline yields will continue to fall in real terms
 3. Parked “young” aircraft will return to service
 4. Aircraft build rates will rise again
 5. Efficient suppliers will gain market share at the cost of weakened competition
- 

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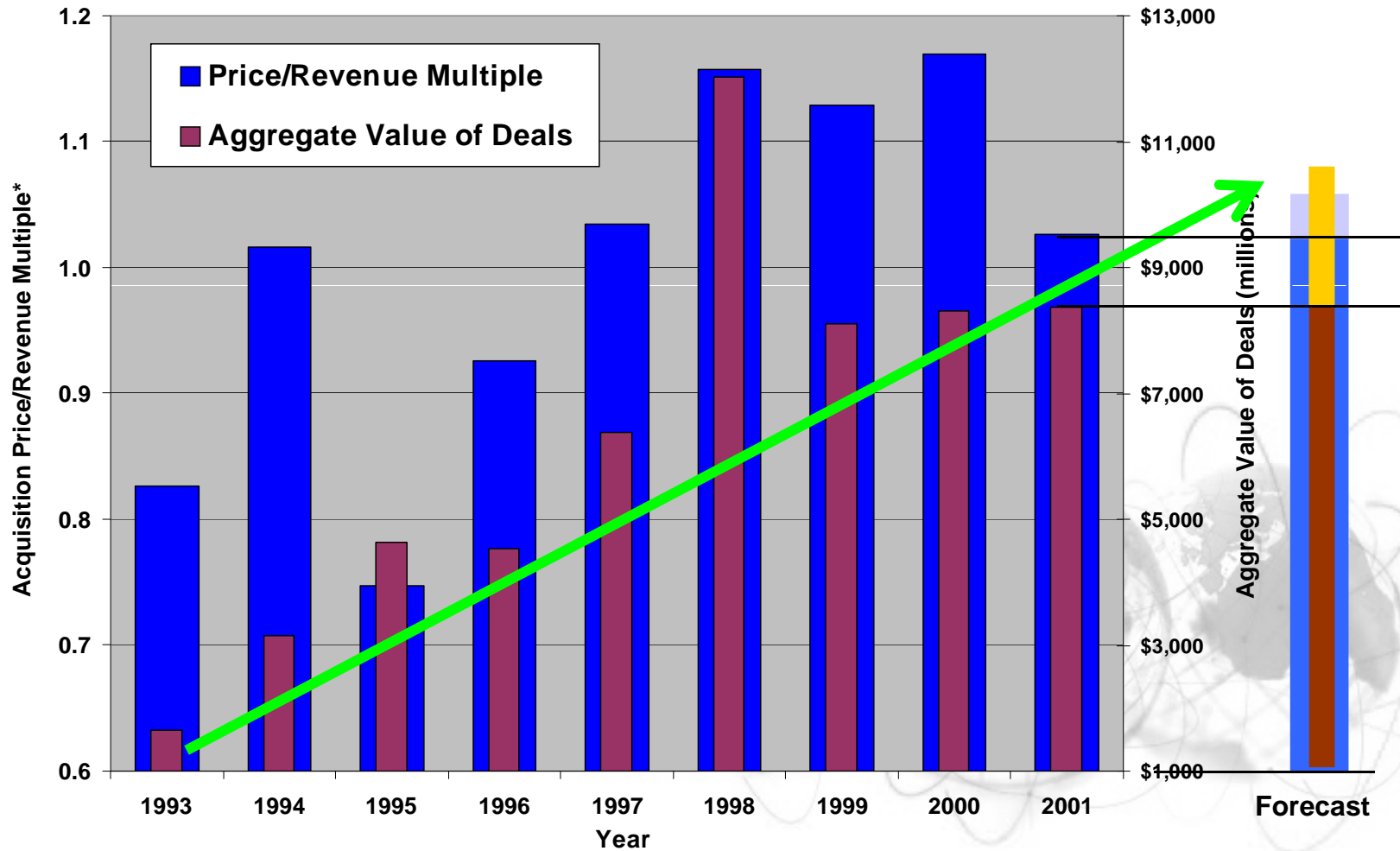
Forecast 2002-2003

6. Banks will return to industry, supporting the strong and efficient
7. Perception about the future for commercial aviation will continually improve
8. M&A activity will rise during the forecast period
 - Annualized Volume > \$9.5Billion
9. As perception become positive, relative prices will quickly increase
 - Average Revenue Multiple > 1.08

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Forecast 2002-2003

Tier 2 M&A Volume and Revenue Multiples



*Based on preliminary analysis of deals where acquisition price and revenue were reported. High and low anomalies have been excluded. Price includes assumption of debt and pension liabilities.

Contact Details

Alderman & Company provides objective financial advice to aerospace industry stakeholders seeking to maximize value.

We stand for: Objectivity. Clarity. Our Client's success.

Our clients include stakeholders of companies involved in manufacturing, distribution and services in the commercial aviation, defense aviation, general aviation, and space industries.

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