40 YEARS OF AIRLINE DEREGULATION: SUCCESSES AND SURPRISES

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REGULATION 1940-1978: THE GOOD

- US air travel is safe, comfortable, and innovative
- Large set of U.S. carriers
  - 11 of 16 original "Trunk Airlines" (two International 'Flag' carriers) & 12 "Local Service"
- Prices set by CAB, target 55% load factor, 12% return

REGULATION: THE BAD & UGLY

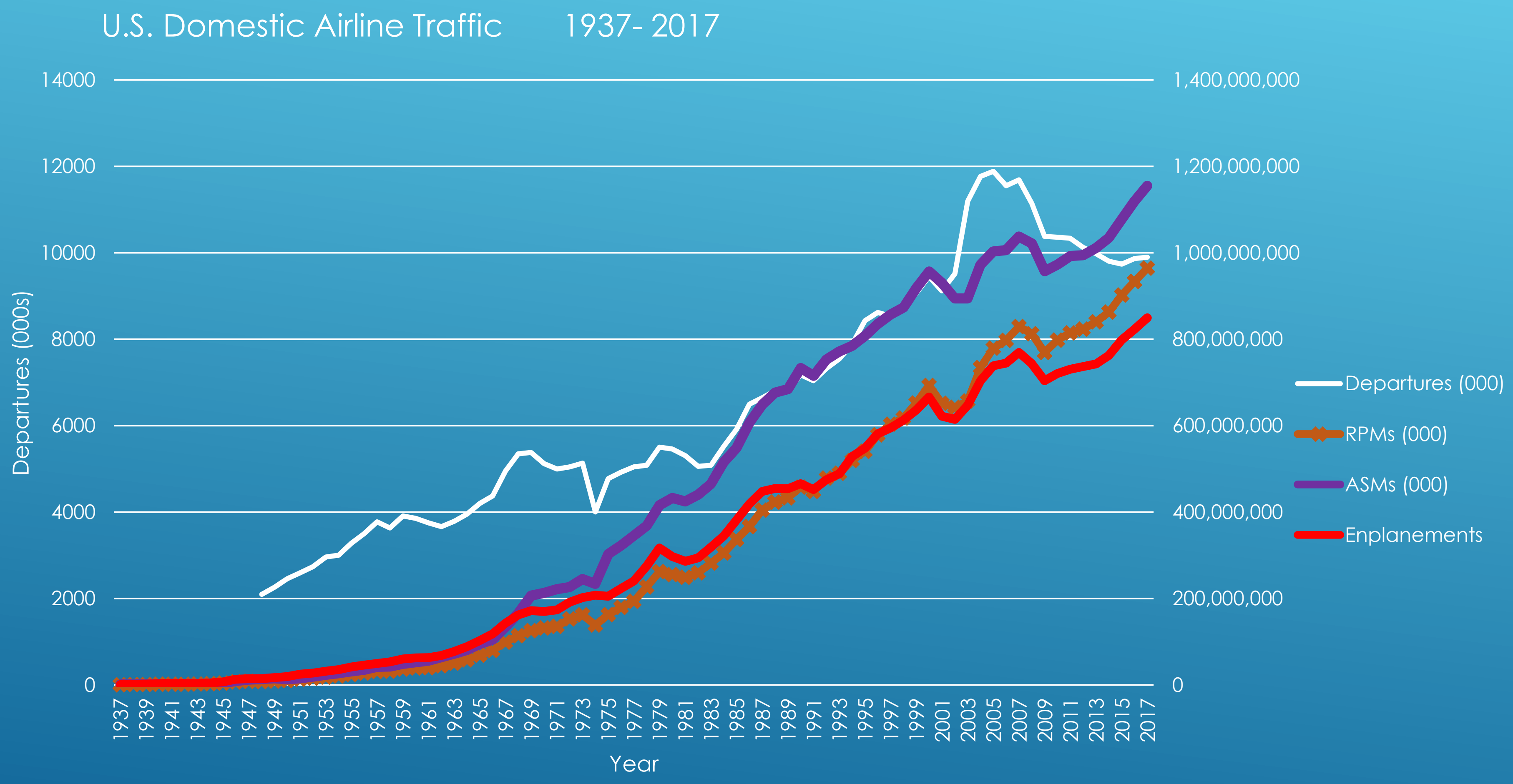
- Administrative route and network structure
  - No new airline entry, informal route moratorium post-1969
  - Most routes have only 1 or 2 airlines
- High and rising prices with little/no discounting
  - Vs. comparable unregulated intrastate routes
- Substantial nonprice competition, of unknown net social value
  - Flight frequency, new aircraft, uniforms, & piano bars
- Airlines are still losing money…
  - Douglas & Miller P↑→frequency↑ →load factor ↓ "death spiral"
- Regulatory evasion efforts (Freddy Laker)

SUCCESSES

- A demonstration project for deregulation
  - Trucking, Railroads, Natural gas, and more….
- Markets replace administrative decision-making
- Air travel access expands
- Prices fall and productivity rises

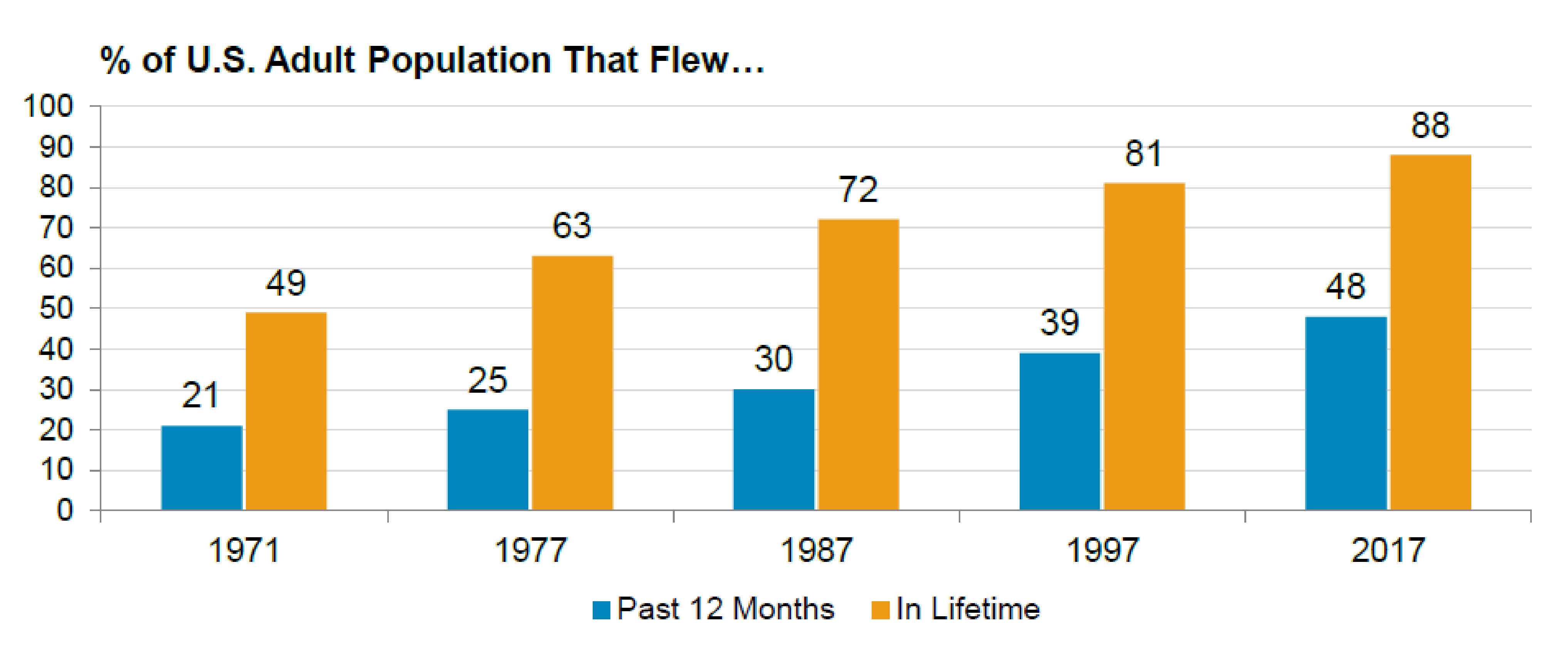
*Air cargo deregulation should not be footnote!

AIR TRAVEL EXPANDS



Source: Data from Severin Borenstein and Nancy L. Rose, "How Airline Markets Work,… or Do They? Regulatory Reform in the Airline Industry." In N. L. Rose, ed., Economic Regulation and Its Reform: What Have We Learned? National Bureau of Economic Research and University of Chicago Press. 2014. Updated with data from www.airlines.org

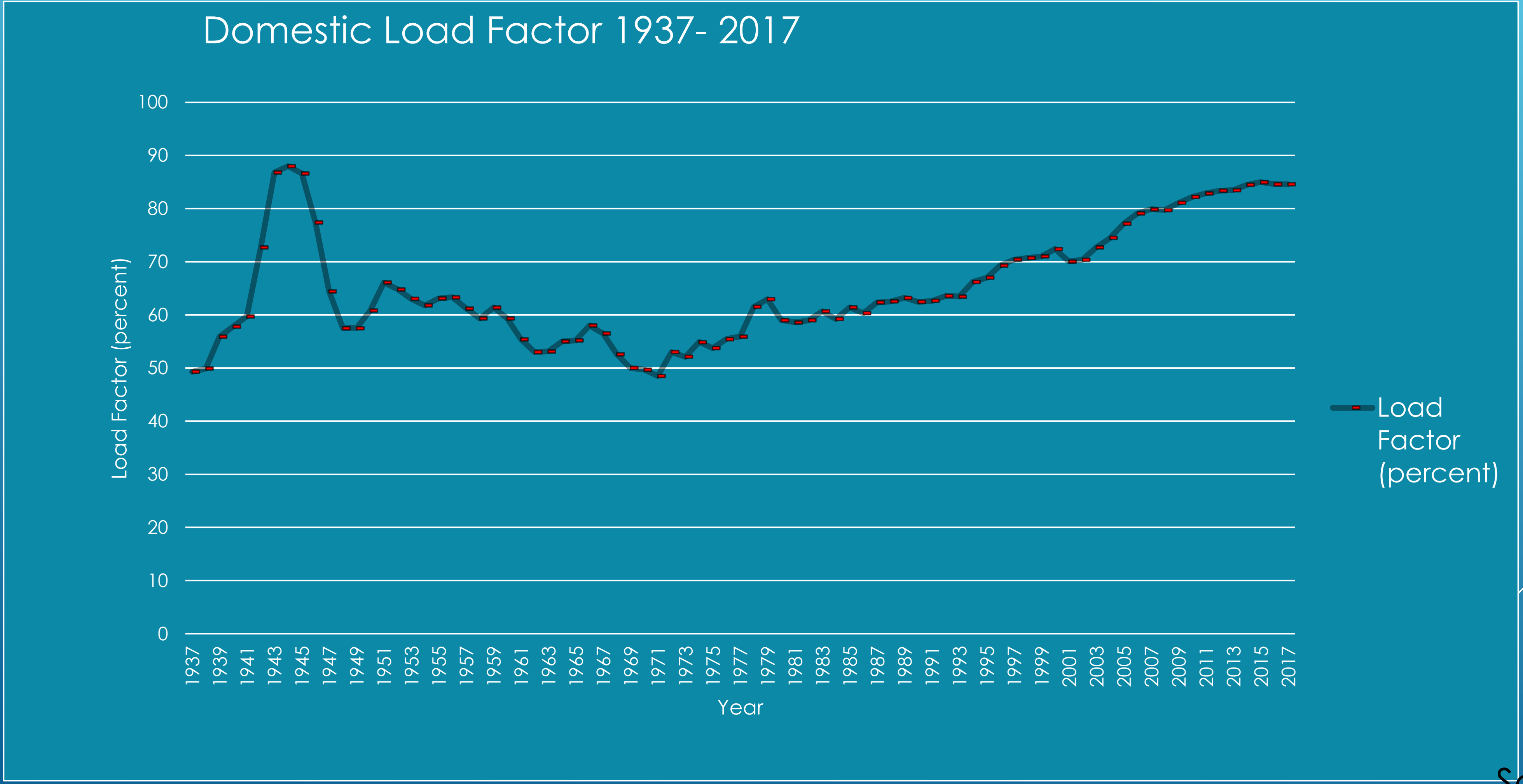
REFLECTING GREATER ACCESS
NOT ONLY MORE FLIGHTS/FLYER



Source: www. airlines.org

PRODUCTIVITY HAS RISEN

Load factors increase efficiency …though not passenger comfort



Source: See slide 5

REAL FARES HAVE DECLINED

Even relative to a regulated benchmark?

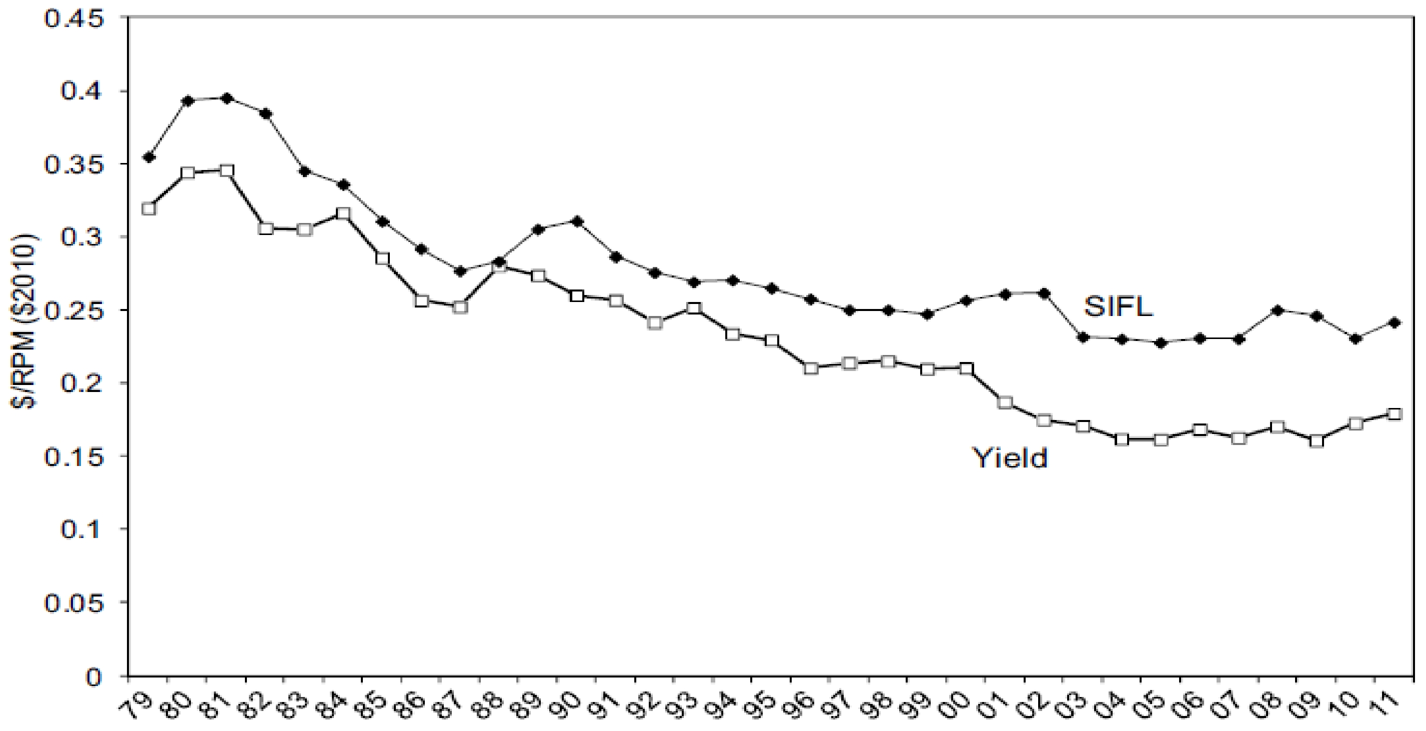
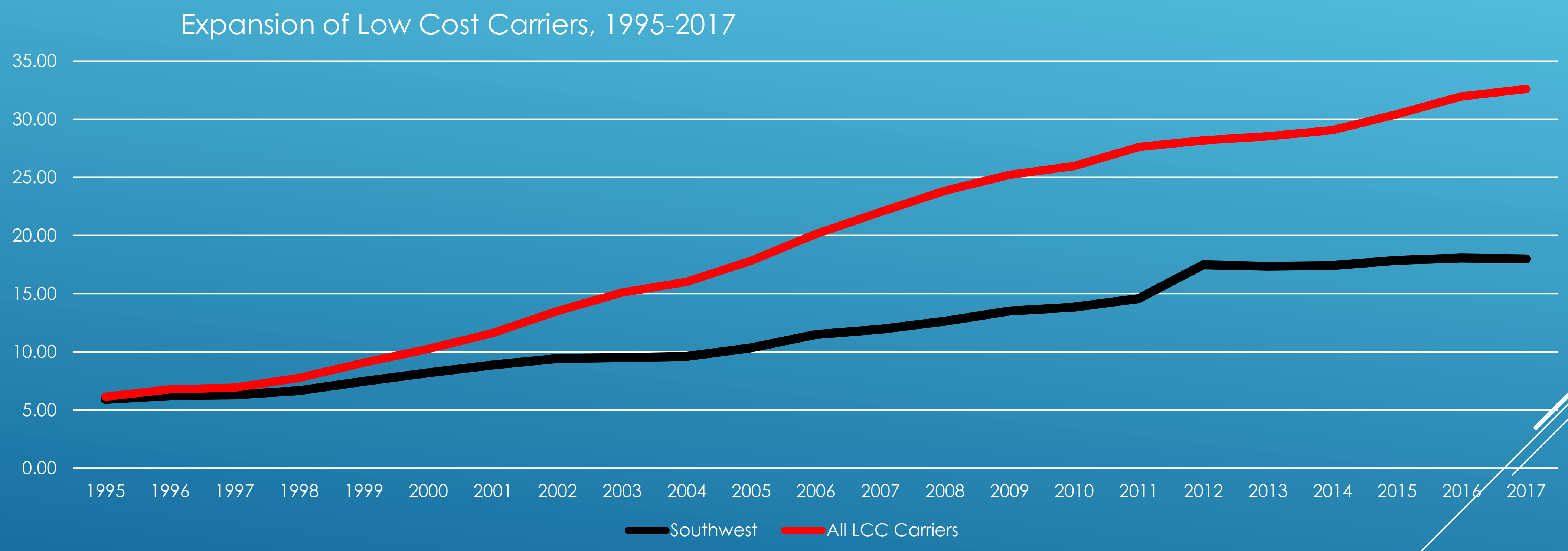


Fig. 2.4 Real yield (rev/passenger mile) versus DOT standard industry fare level, 1979–2011

Source: See slide 5

EXPANSION BY SOUTHWEST & OTHER LCCS
Critical to competition over past 20 years

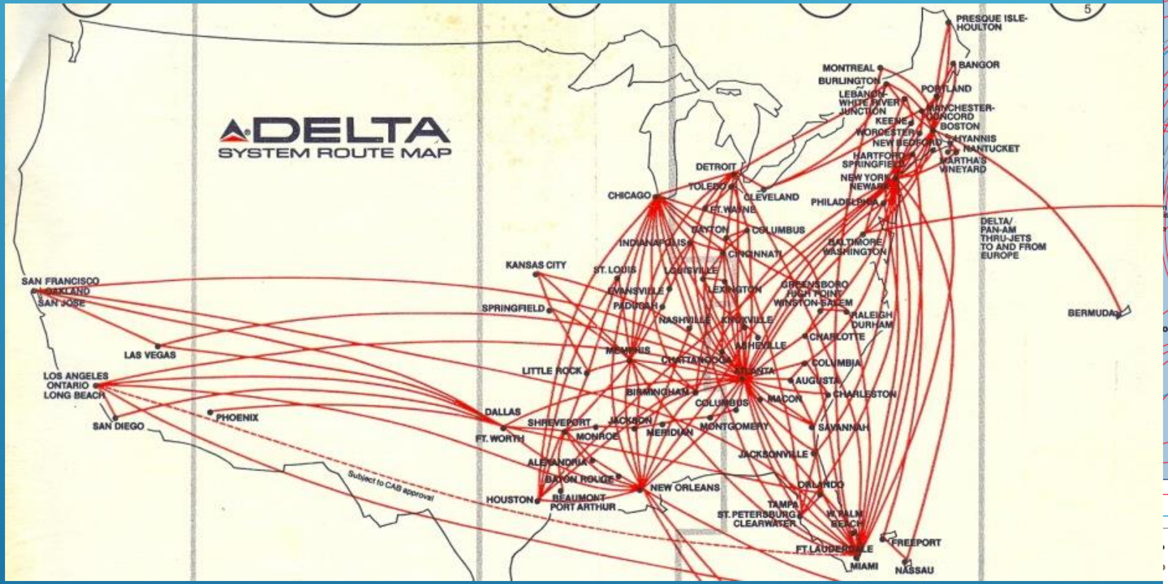


Source: Calculations from DB1B

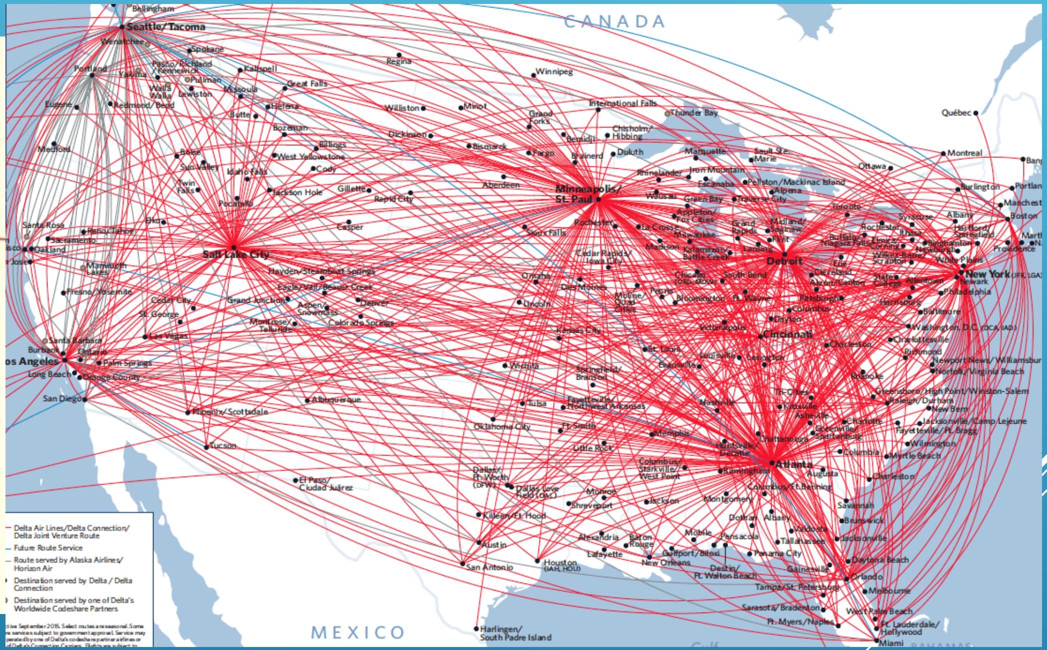
SOME SURPRISES

- Network evolution to hubs
  - The importance of domestic feed for international airlines (PanAm, TWA)
  - Congestion & delays: Whose fault?
- Pricing strategies
  - Loyalty programs, price dispersion & ancillary fees
- Entry, exits, and consolidations
  - Strategic leverage and bankruptcies?

NETWORK EVOLUTION: HUB AND SPOKE CONNECTS MANY O-D PAIRS

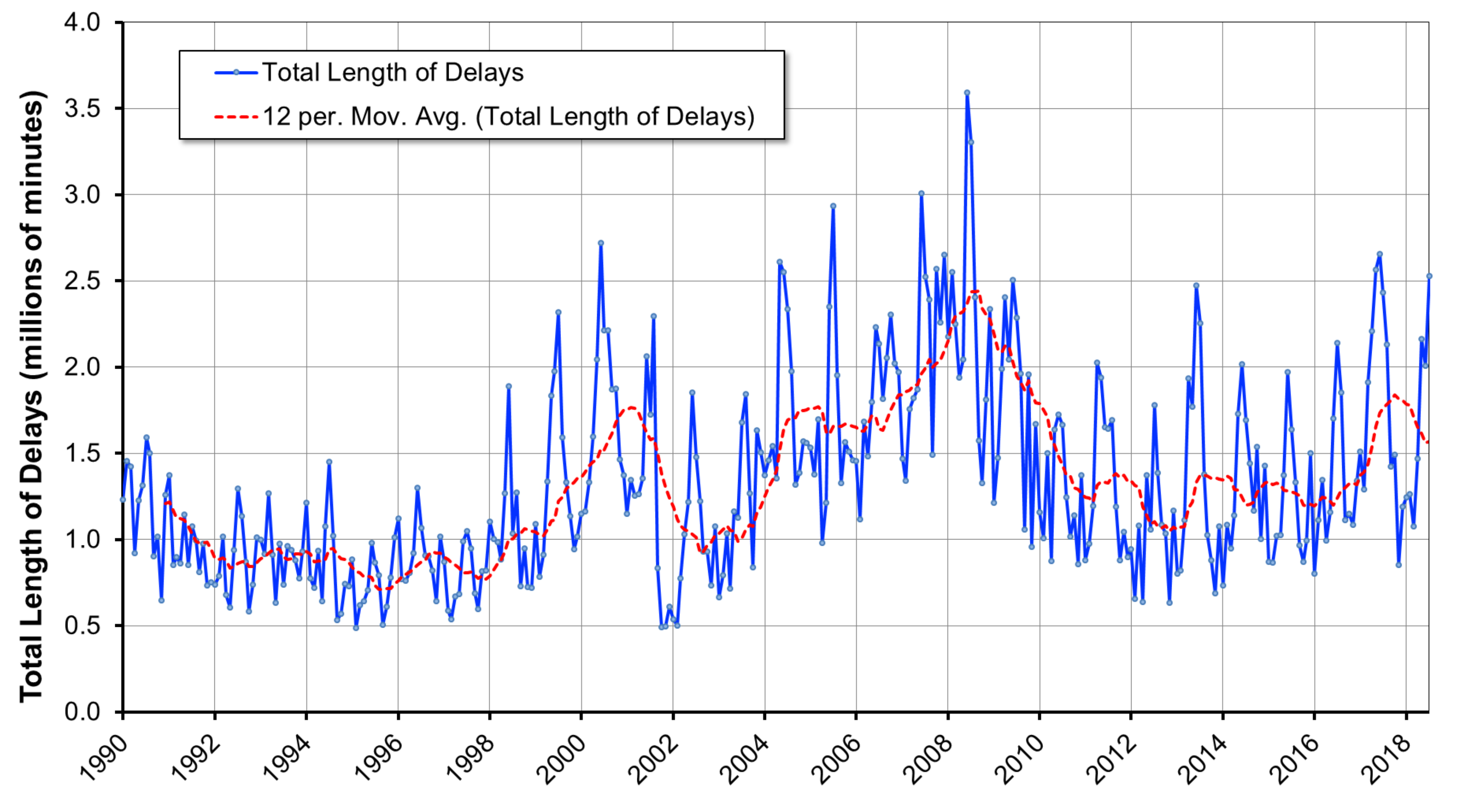


Delta 1974 System Map



Delta 2015 System Map

CONGESTION AND FLIGHT DELAYS



Data source: FAA Operational Network (OPSNET) (data through June '17)
Courtesy of J. Hansman, "Overview of Airline Industry Forces and Trends, Fall 2018," MIT ICAT

NEW PRICING STRATEGIES EXPANDED PRICE DISPERSION

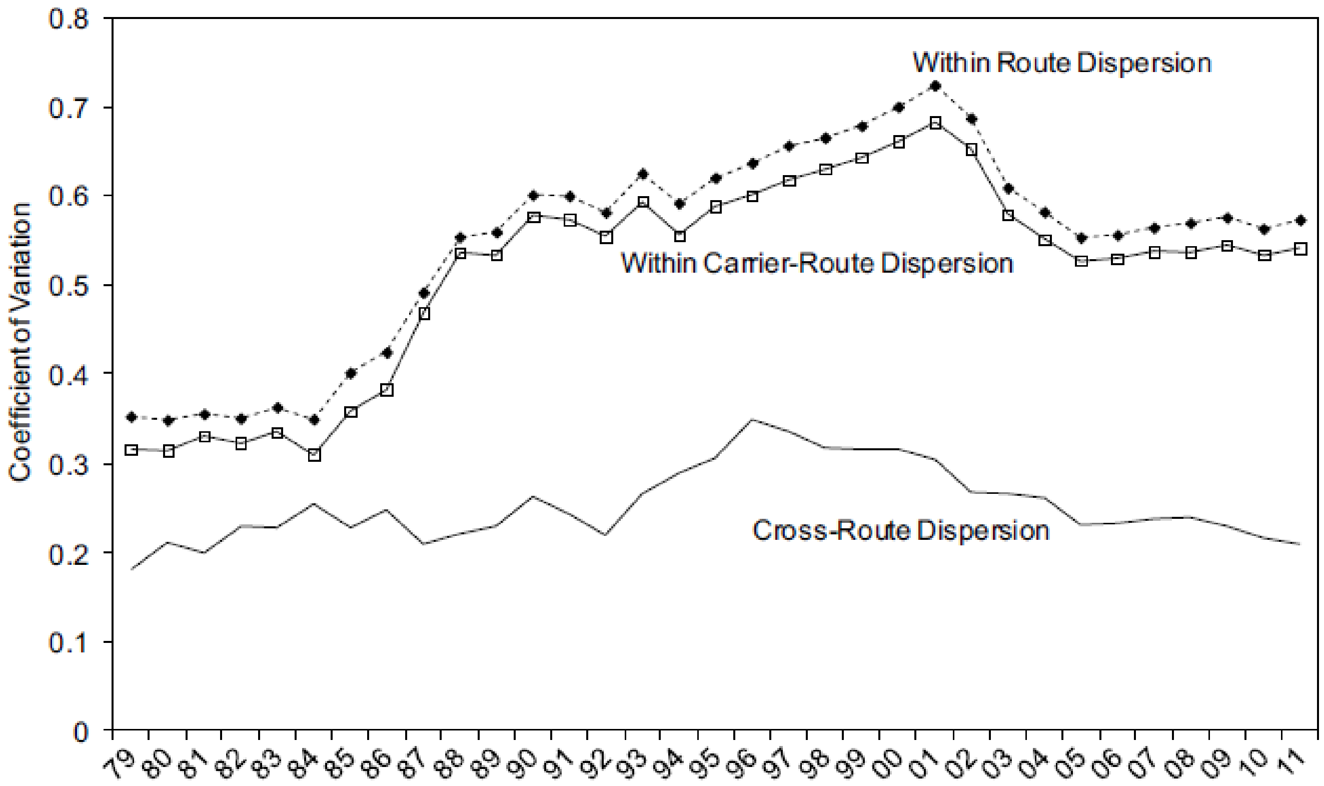


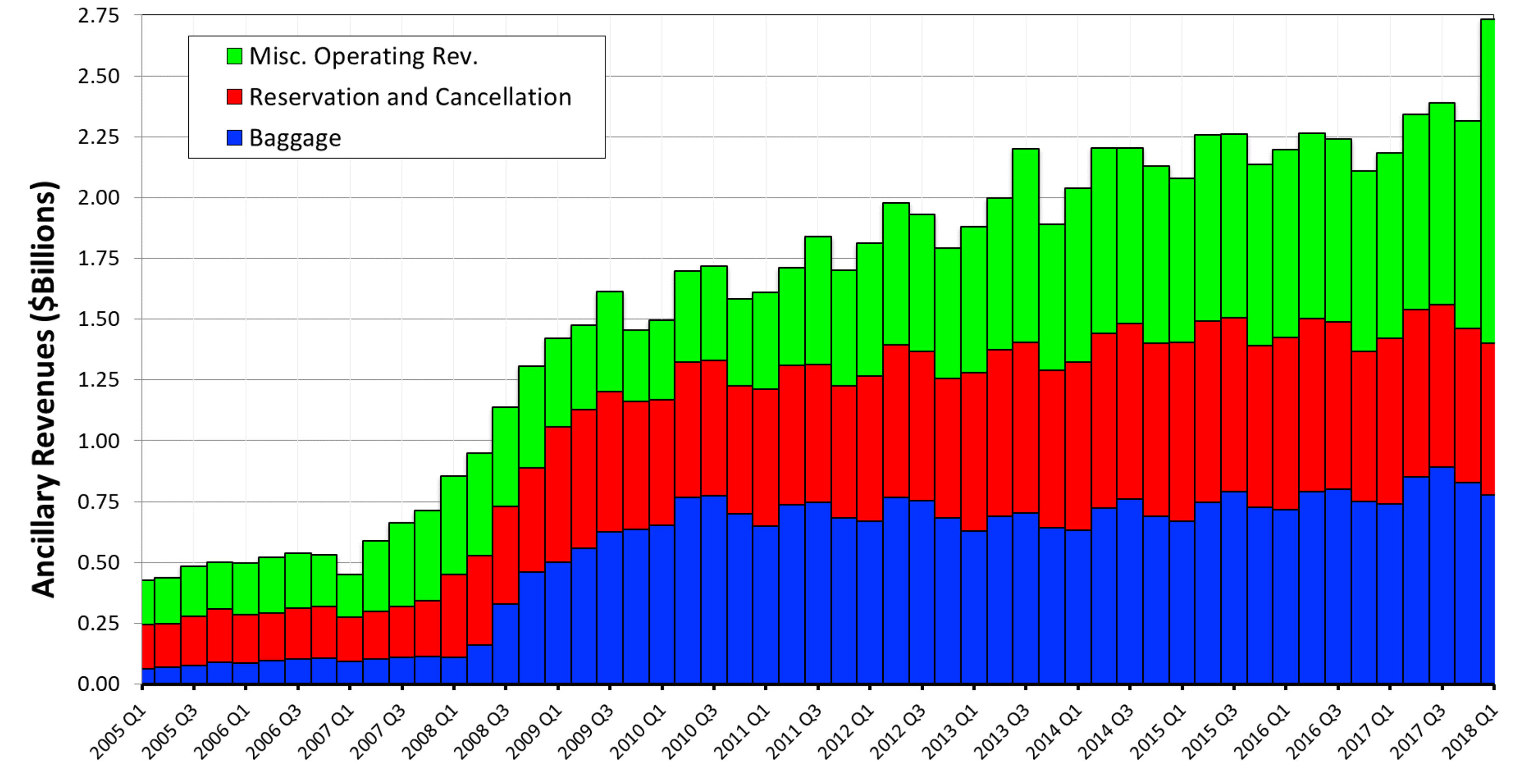
Fig. 2.5 Within-route and cross-route price dispersion, 1979–2011

Source: See slide 5

FARES TELL ONLY PART OF THE STORY

and this excludes seat assignment, food, other on board revenue

FEE AND ANCILLARY REVENUE GROWTH 2005-2018 (NOMINAL $)



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ONGOING CHALLENGES

- Consolidation: Mergers & Alliances
    - What should be the standard?
    - International competition: alliances & antitrust immunity?
    - Conduct?
- Pricing transparency
- Infrastructure investments and access