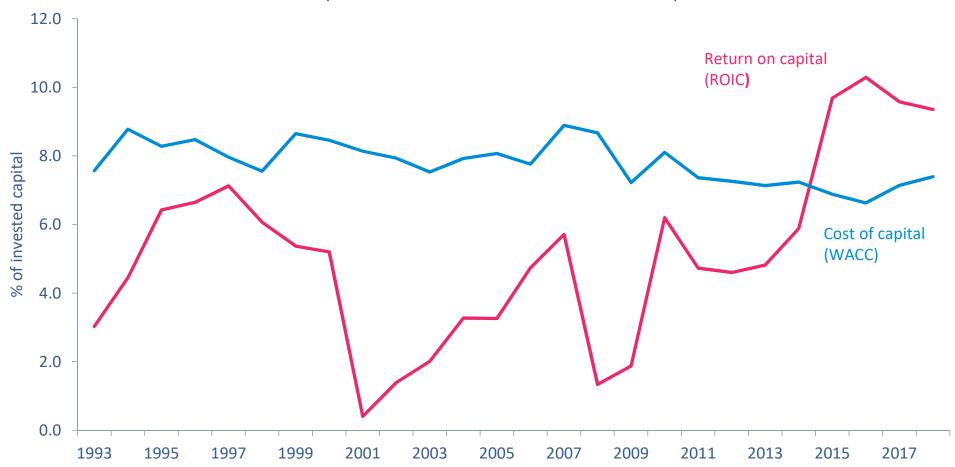


#### Outline

- Why is the airline industry suddenly profitable?
  - After decades of investor capital destruction
  - Is the change widespread?
  - Have the underlying economics of the industry changed?
  - Why is the emergence of protectionism such a threat?
- How does air transport bring economic benefit?
  - Users
  - Wider economic benefits
    - Come from the people, goods, capital and ideas we carry between cities
    - Rather than the jobs required to run the service (with some exceptions)

#### Airlines have suddenly become profitable (for their equity investors)

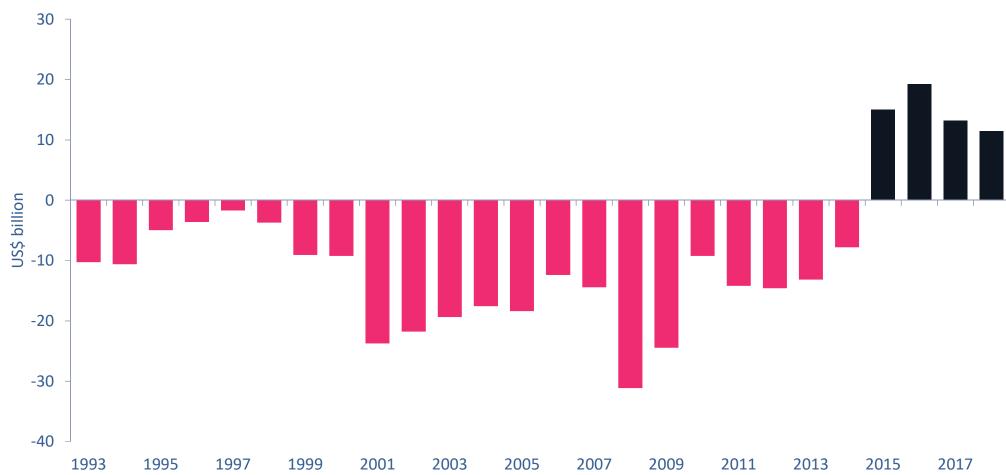
Return on capital invested in airlines and their cost of capital



Source: IATA Economics using data from McKinsey, The Airlines Analyst, IATA forecasts

#### After decades of investor value destruction





Source: IATA Economics using data from McKinsey, The Airlines Analyst, IATA forecasts

## And widespread airline failures

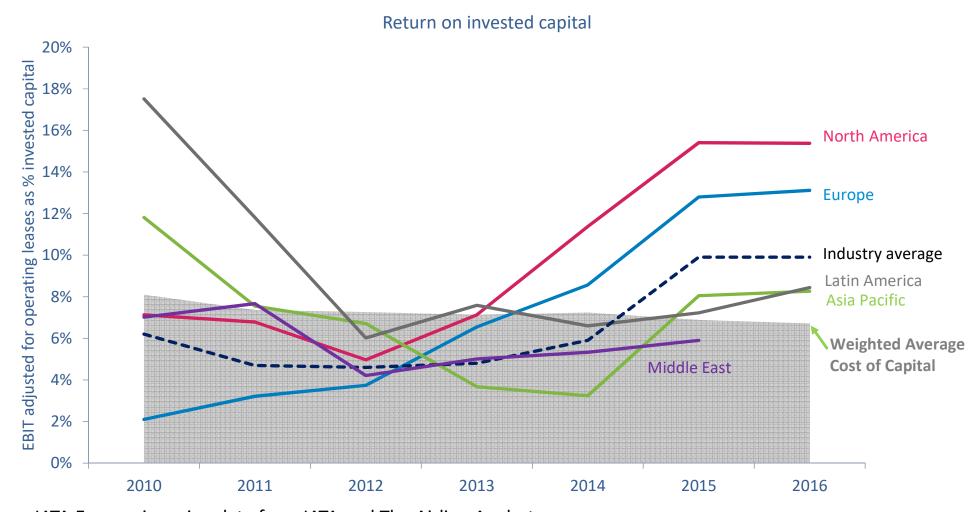


Failed

**Survived** 

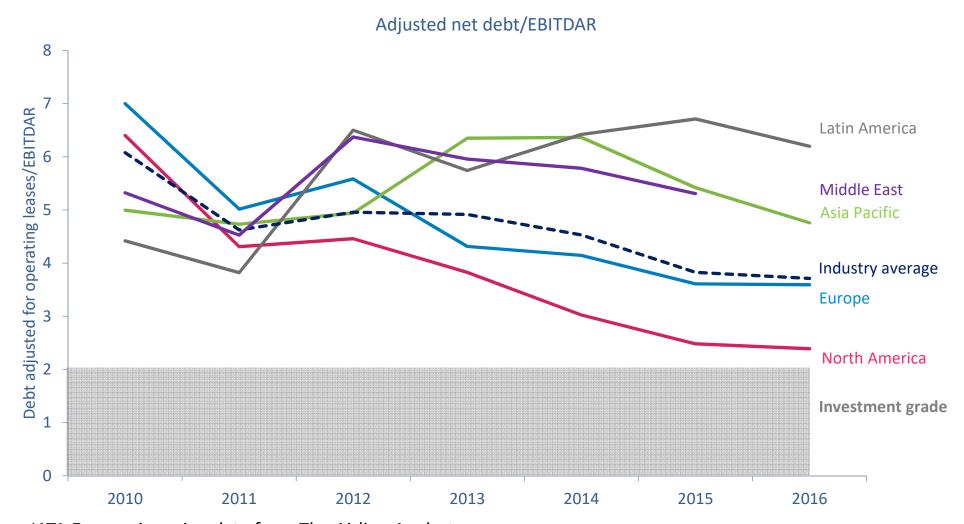
Source: HSBC report – early 2014 situation. Since then Monarch and airberlin have failed

## But improvement has been very uneven across the industry



Source: IATA Economics using data from IATA and The Airline Analyst

# Balance sheets remain highly leveraged in some regions



Source: IATA Economics using data from The Airline Analyst

## There has always been a paradox at the heart of air transport

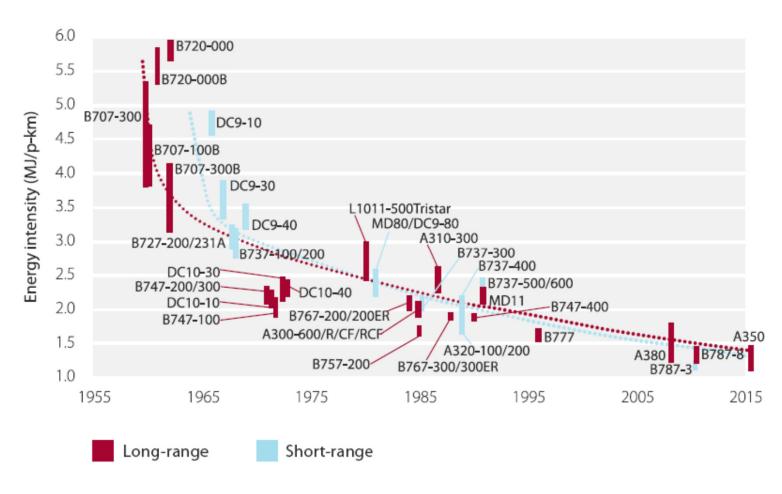
Industry total for each year, 2004 - 13 CAGR	, percent	Industry aggregate, 2004 - 13 simple averag	e, percent
Healthcare equipment and services	6.2	Software and services	⟨⟨ 94.7
Rail	6.2	Pharma, biotech, and life sciences	45.7
Airlines	6.1	Household and personal	36.4
Energy	6.0	Healthcare equipment and services	33.9
Tech hardware and equipment	5.8	Media	30.7
Materials	5.2	Food, beverage, and tobacco	26.8
Software and services	4.7	Tech hardware and equipment	24.7
Utilities	4.6	Communications and professional services	21.9
Freight forwarding	4.5	Semiconductors and equipment	21.5
Capital goods	4.3	Telecom	20.6
Economy	4.3	Postal/CEP	16.6
Pharma, biotech, and life sciences	4.2	Consumer services	15.7
Retailing	4.1	Retailing	15.7
Food, beverage, and tobacco	3.9	Consumer durables and apparel	15.6
Food and staples retail	3.8	Economy	13.9
Transportation & logistics	3.6	Capital goods	13.6
Trucking	3.4	Bus	13.6
Contract logistics	3.4	Food and staples retail	13.3
Household and personal	3.3	Energy	12.7
Telecom	3.3	Materials	12.4
Shipping	3.0	Contract logistics	12.4
Semiconductors and equipment	2.8	Freight forwarding	2015-1
Communications and professional services	2.6	Rail	8.1
Consumer services	2.4	Shipping	7.7
Consumer durables and apparel	2.4	Transportation & logistics	7.5
Bus	2.2	Automobiles and components	6.8
Automobiles and components	2.1	Trucking	6.4
Postal/CEP	1.6	Utilities	6.1
Media	1.4	Airlines	4.0

<sup>1</sup> Real revenue growth, 2004 - 13 CAGR inflation adjusted, median for industry

Source: McKinsey presentation to IATA

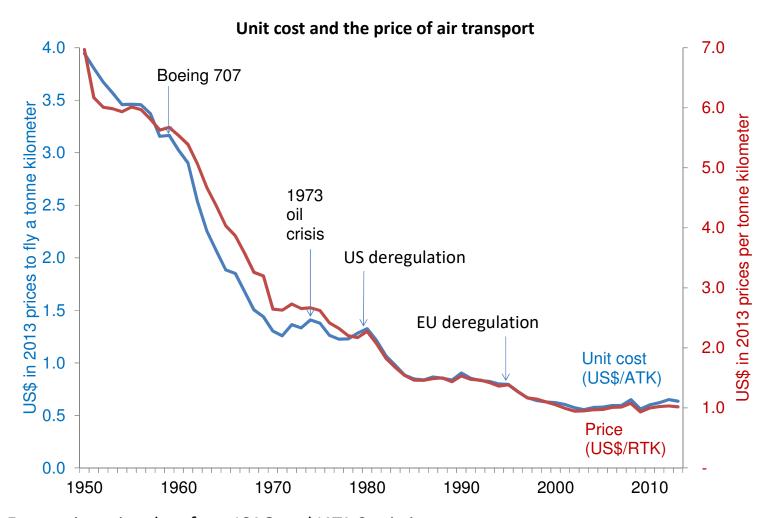
<sup>2</sup> ROIC after tax, excluding goodwill; excludes outliers

#### Technology continues to cut costs dramatically



Source: Lee

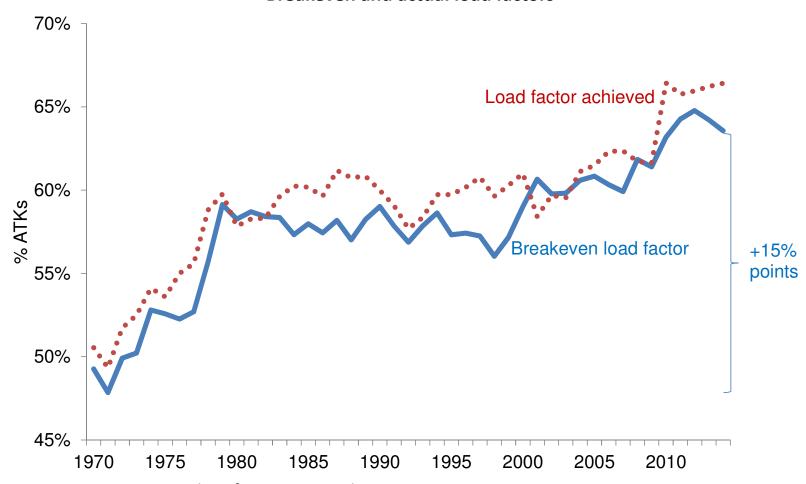
#### Typically airlines pass all gains through to consumers



Source: IATA Economics using data from ICAO and IATA Statistics

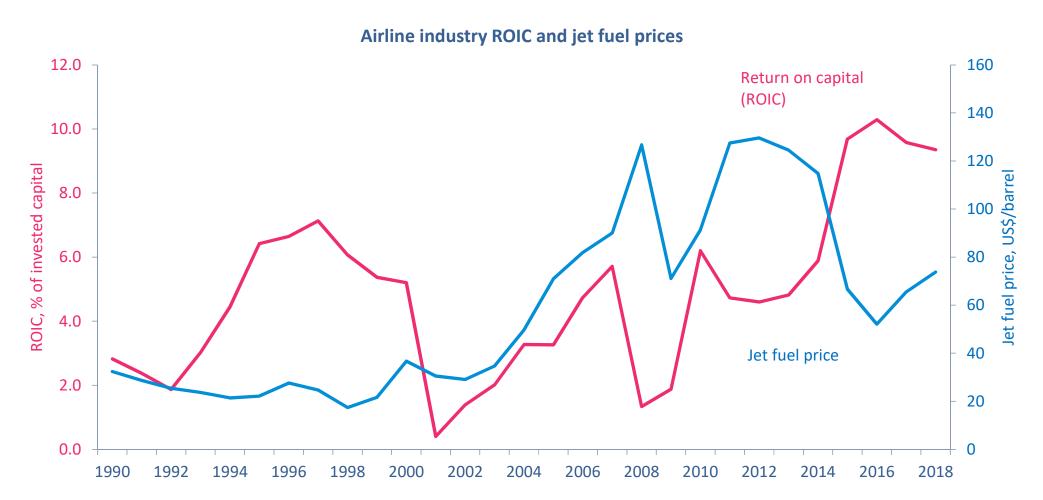
#### In fact prices have fallen further than costs forcing up breakeven loads

#### Breakeven and actual load factors



Source: IATA Economics using data from ICAO and IATA Statistics

## Have industry economics changed or is it just low fuel costs?



Source: IATA Economics using data from McKinsey, Platts and own forecasts

#### The underlying economics of air transport

- Perishable
- Fixed costs high
- Barriers to entry low
- Competitive advantages hard to defend
- Aircraft are a platform to serve many markets
- Economies of scale in aircraft size but business travelers want frequency and flexibility
- Few scale economies in fleet size but economies of density in networks

#### **OUTCOME:**

- Prices pushed down towards variable costs,
- But ways need to be found to cover fixed costs:
  - Differential pricing, sequential use of coupons, non-refundable tickets....and now ancillaries
- Network density economies through merger prevented by bilateral and O&C regulation barriers:
  - Leading to code shares, alliances and now ATI JVs and equity partnerships on international markets

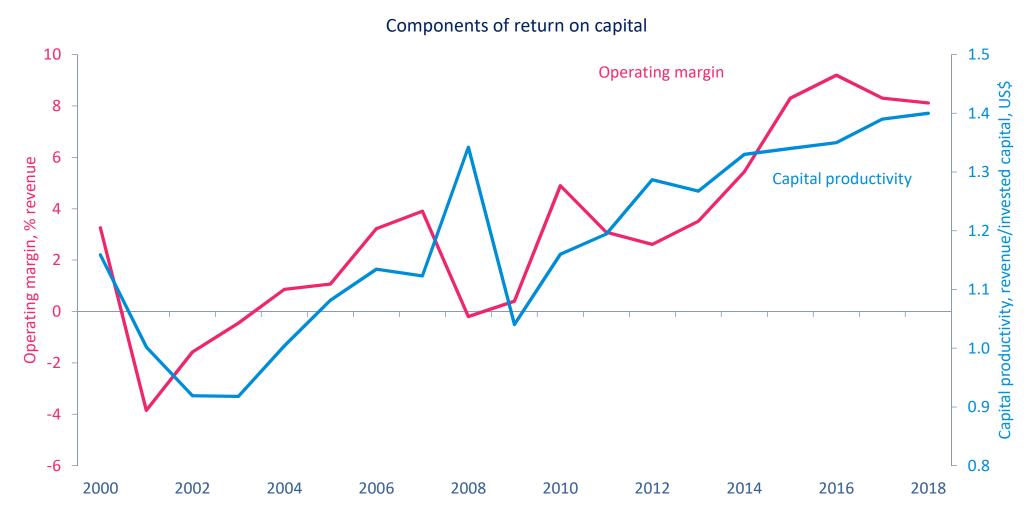
### Improvement in performance pre-dates fall in fuel costs





Source: IATA Economics using data from ICAO, IATA Statistics, IATA forecasts

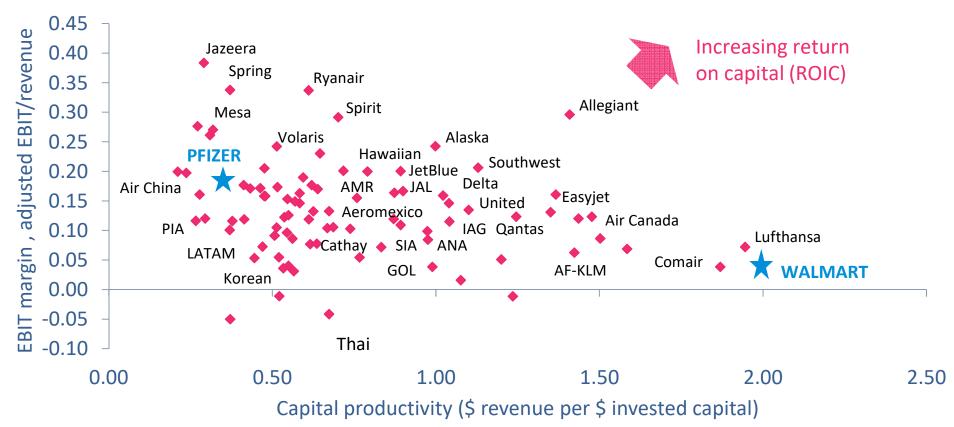
# Airlines are sweating assets as well as improving margins



Source: IATA Economics using data from ICAO, McKinsey, The Airline Analyst, IATA forecasts

#### Wide variety of successful business models

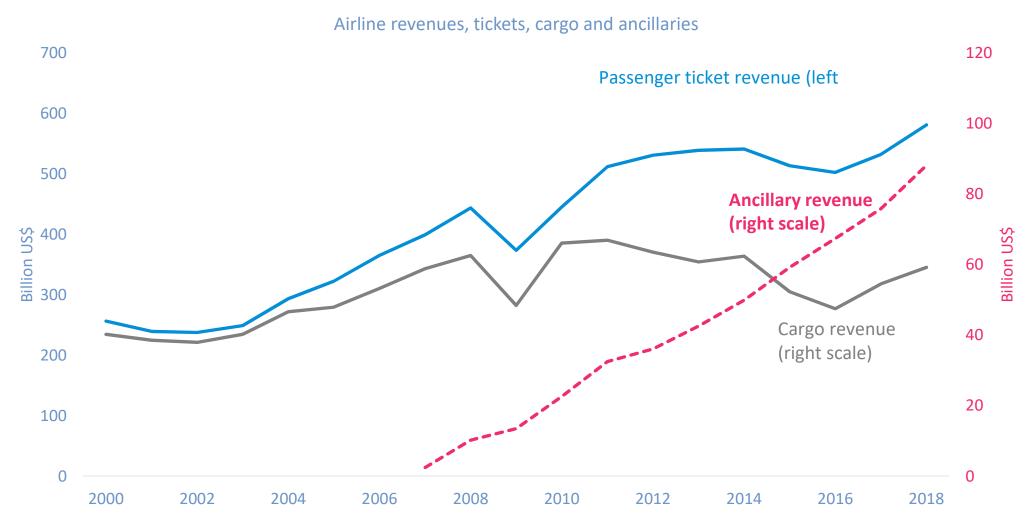
#### 2015 ROIC = adjusted EBIT/revenue \* revenue/invested capital



Source: IATA using data from The Airline Analyst

IATA Economics www.iata.org/economics

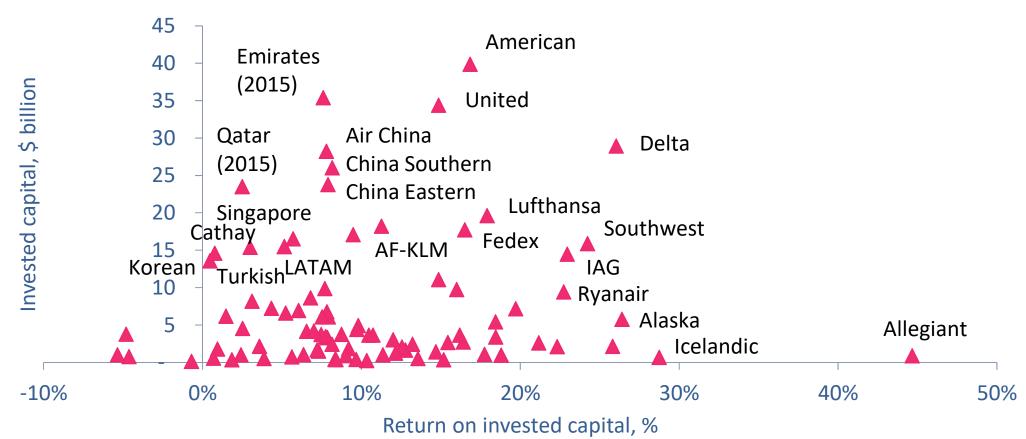
# Ancillaries are changing the nature of the airline product



Source: IATA Economics using data from ICAO, The Airline Analyst, PaxIS, IdeaWorks

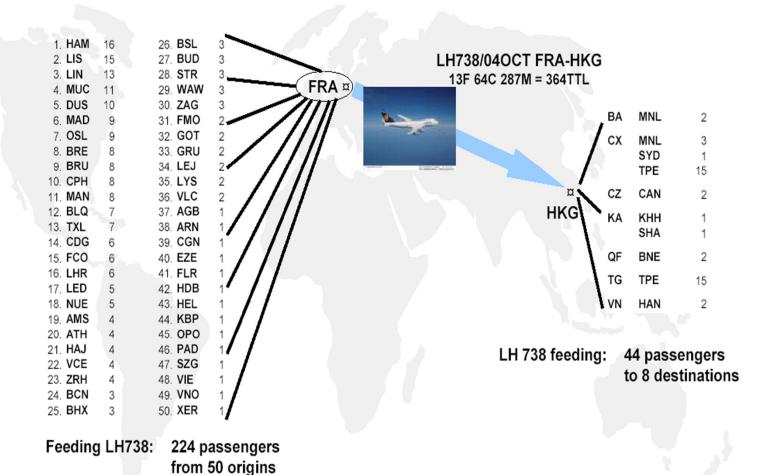
#### Consolidation important but not simply because of size

#### Return on invested capital versus invested capital, 2016



Source: IATA Economics using data from IATA and The Airline Analyst

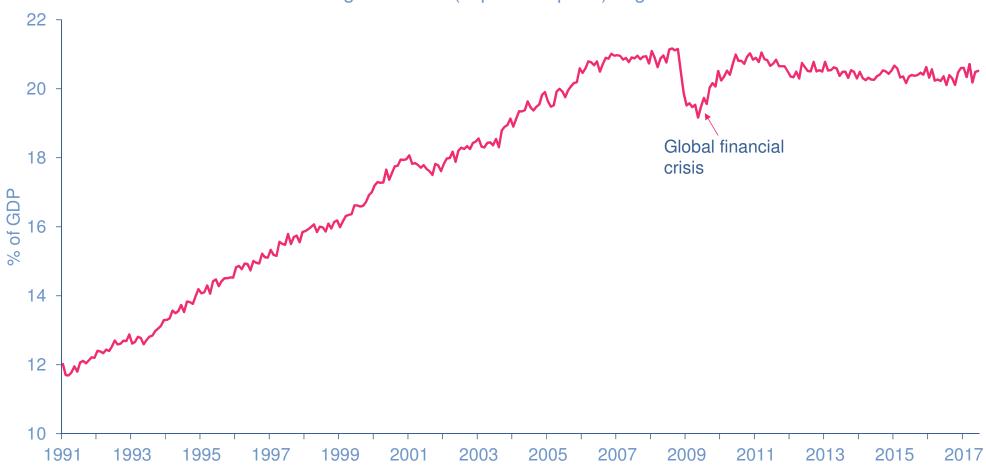
## JVs doing better job than code shares/alliances to get density economies



Source: Lufthansa

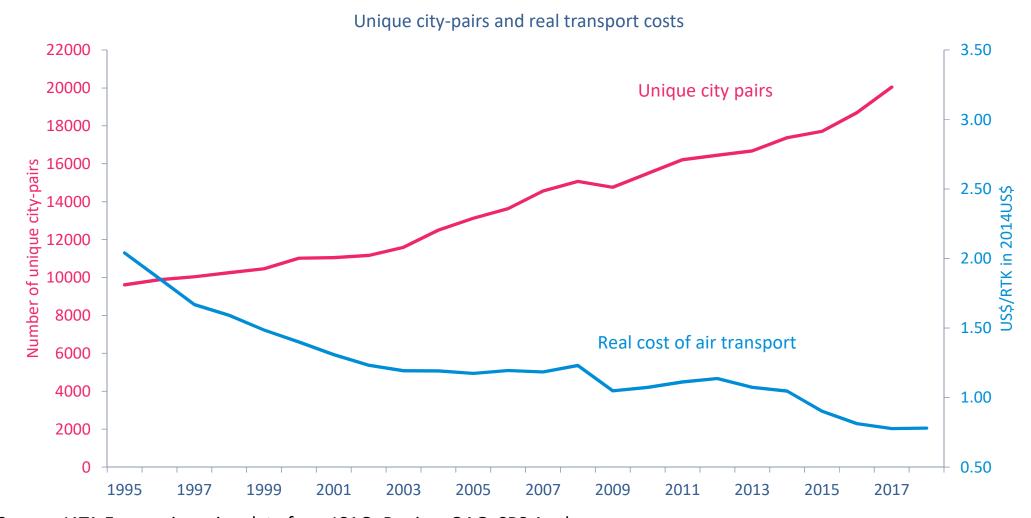
# Protectionism (or the new 'localism') is a major threat





Source: IATA Economics using data from Netherlands CPB

# Benefits to consumers (and economy) arise from cheap city connections



Source: IATA Economics using data from ICAO, Boeing, OAG, SRS Analyser

#### Wider economic benefits

- Often measured by the jobs and GVA in the supply chain, through I-O models
  - Economic footprint is a useful description
  - But it measures cost not benefit
    - Do labor productivity gains really mean lower wider economic benefits?
- Economic benefits generated by connecting cities at lower cost
  - Air transport network is an infrastructure asset, a bridge between cities
  - Boosting the productive capacity of an economy
  - Generating flows of people, goods, capital, ideas, competitive pressure
  - Raising productivity through agglomeration, gains from trade
  - Higher GDP from the supply-side, in economies close to full capacity
  - Demand-side/spending flows do matter where economies/regions under-developed
  - More research and evidence required!



#### **NEW IATA ECONOMICS RESEARCH APP**

Keep up to date with IATA Economics' latest analysis on key aviation issues and market trends.

Receive personalised notifications when new research is available, share content through social media and email, and read your favourite content off-line, perfect for people on the go!



Access industry-leading economic analysis on key aviation issues and market trends through:

- + Reports
- → Charts
- Presentations
- Videos and more.

To find out more visit: www.iata.org/econapp

