



Airline markets *and* airline economics oddities

2 March 2017
Cranfield

Brian Pearce
Chief Economist, IATA
www.iata.org/economics

Airline markets are shifting, both in terms of product...

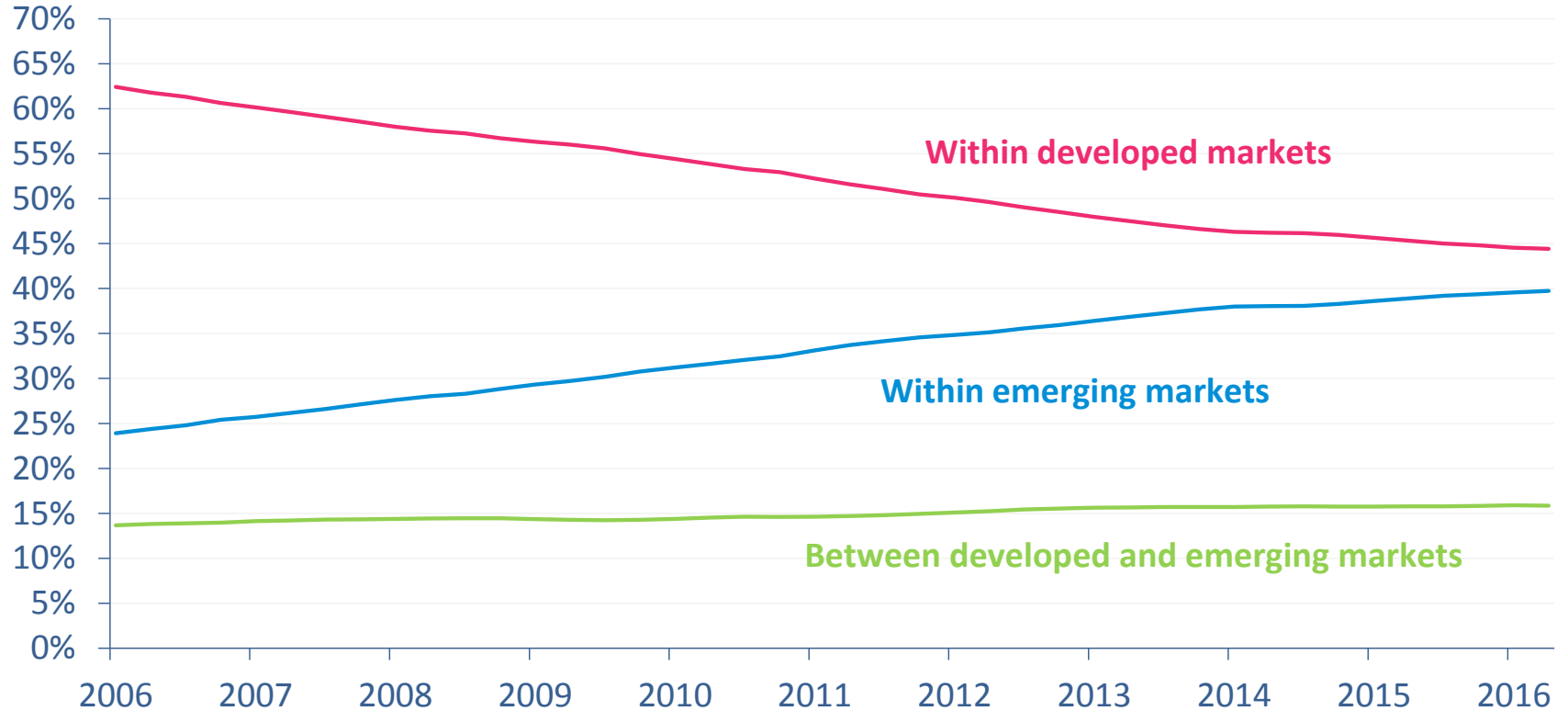
Airline revenues, tickets, cargo and ancillaries



Source: IATA Economics using data from PaxIS+, IdeaWorks, CargoIS, ICAO and IATA Statistics

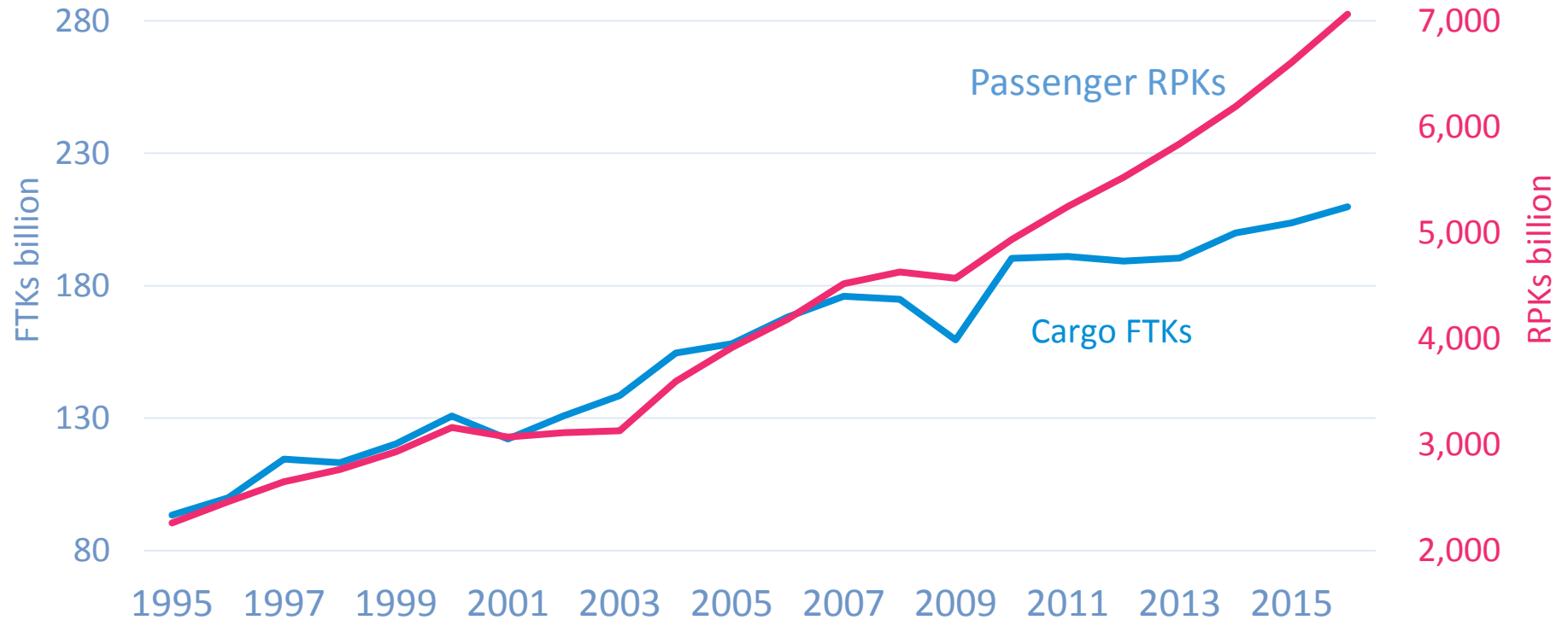
...And in terms of geography

% of total O-D journeys (12m rolling sum)



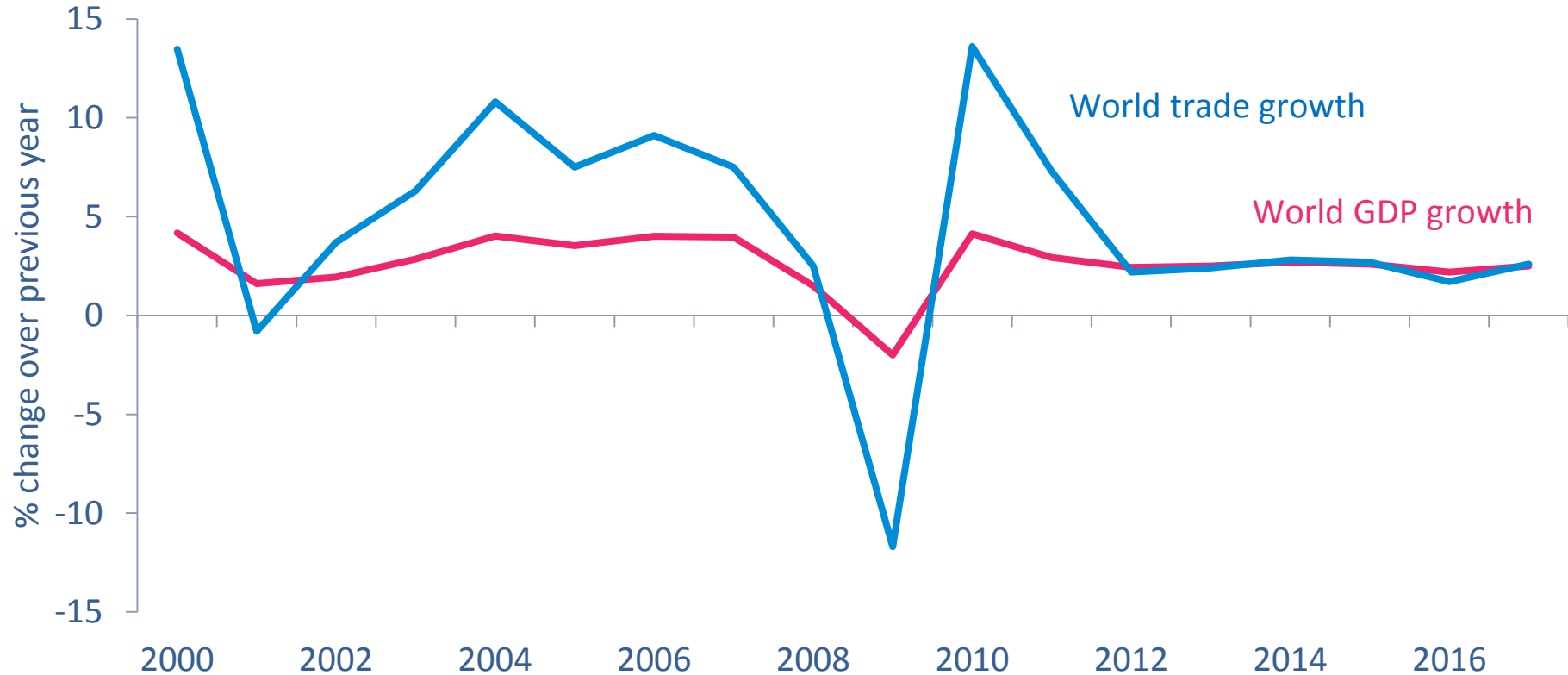
The GFC precipitated one key divergence

Air travel and cargo volumes



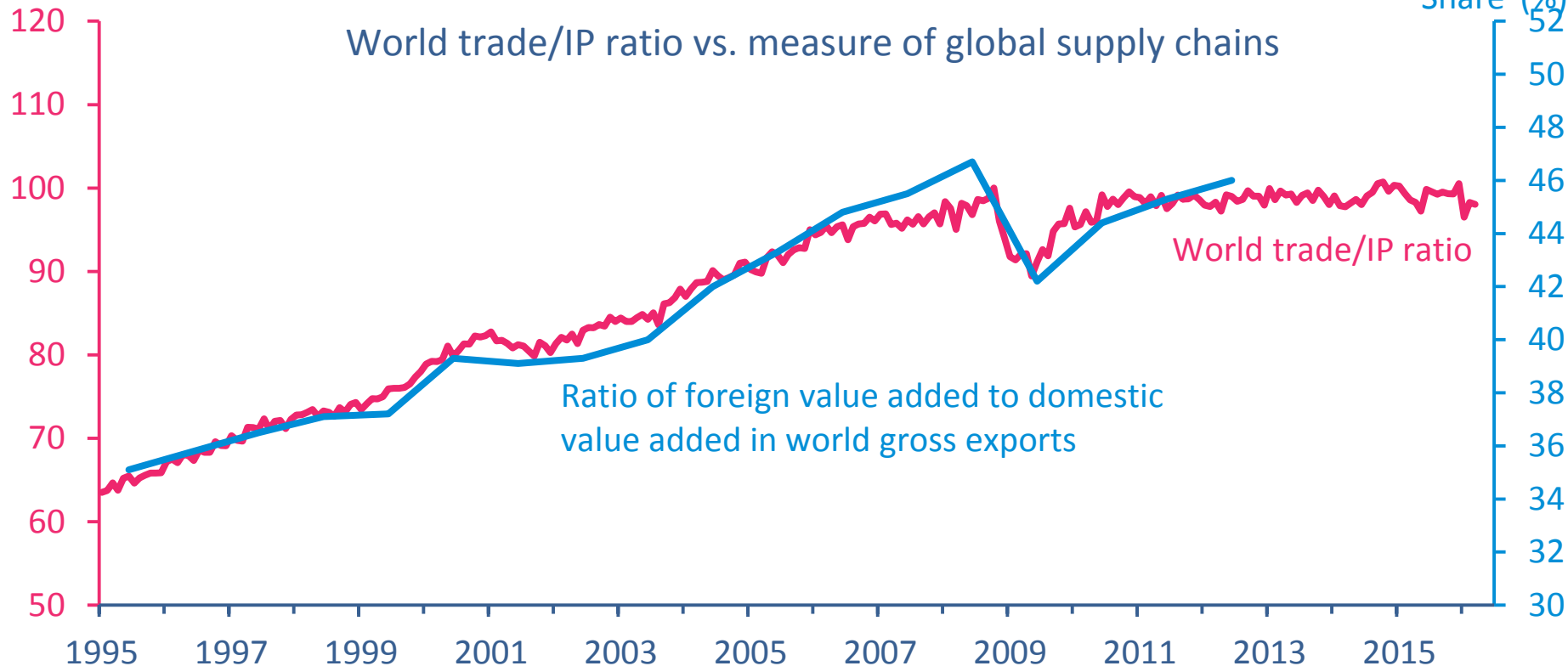
Retreat from globalization

World GDP and cross-border trade growth



Supply chains have been shortened

Index (Oct 2008=100)



Protectionism is on the rise



Donald Trump Vows to Rip Up Trade Deals and Confront China

The New York Times
28 June 2016

Across Europe, distrust of mainstream political parties is on the rise

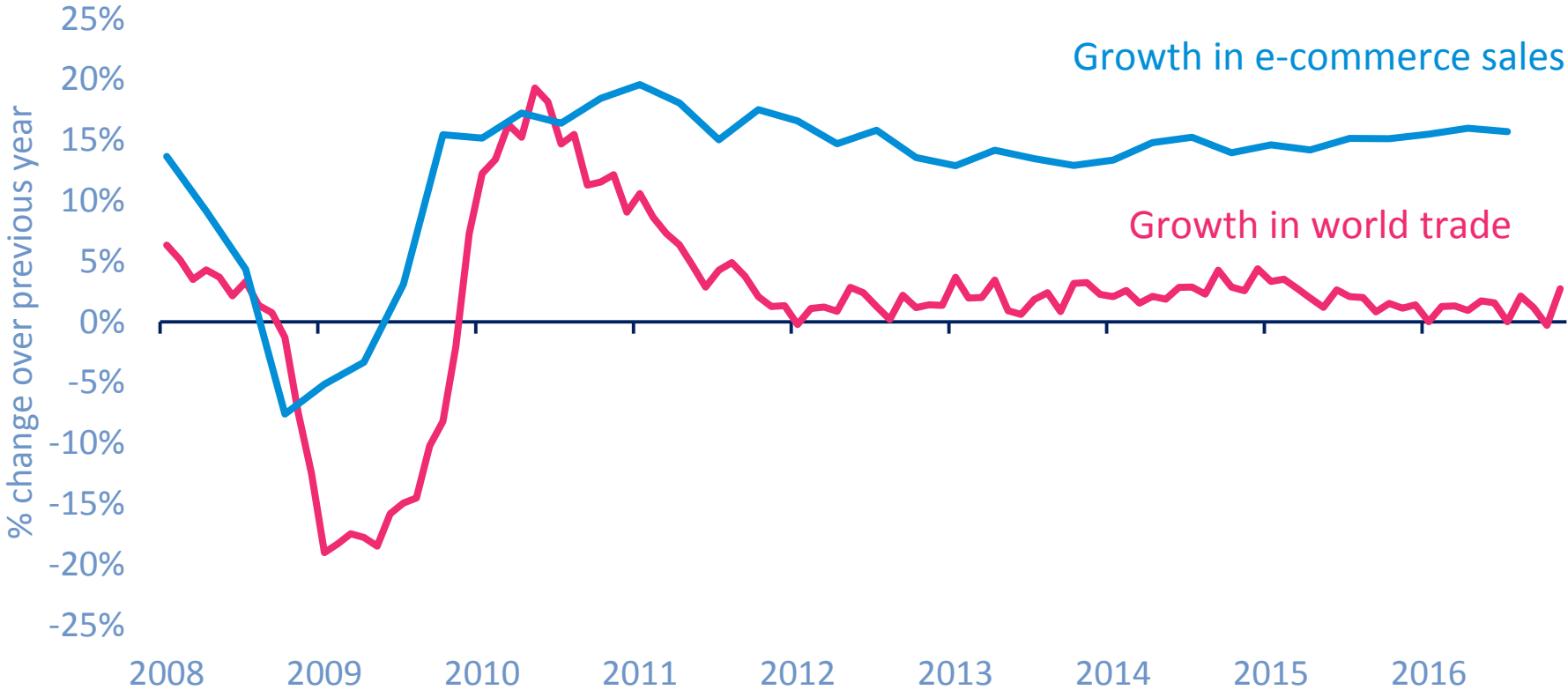
Guardian
25 May 2016

**Clamour for trade protectionism on rise:
Arun Jaitley**

CNBC
13 October 2016

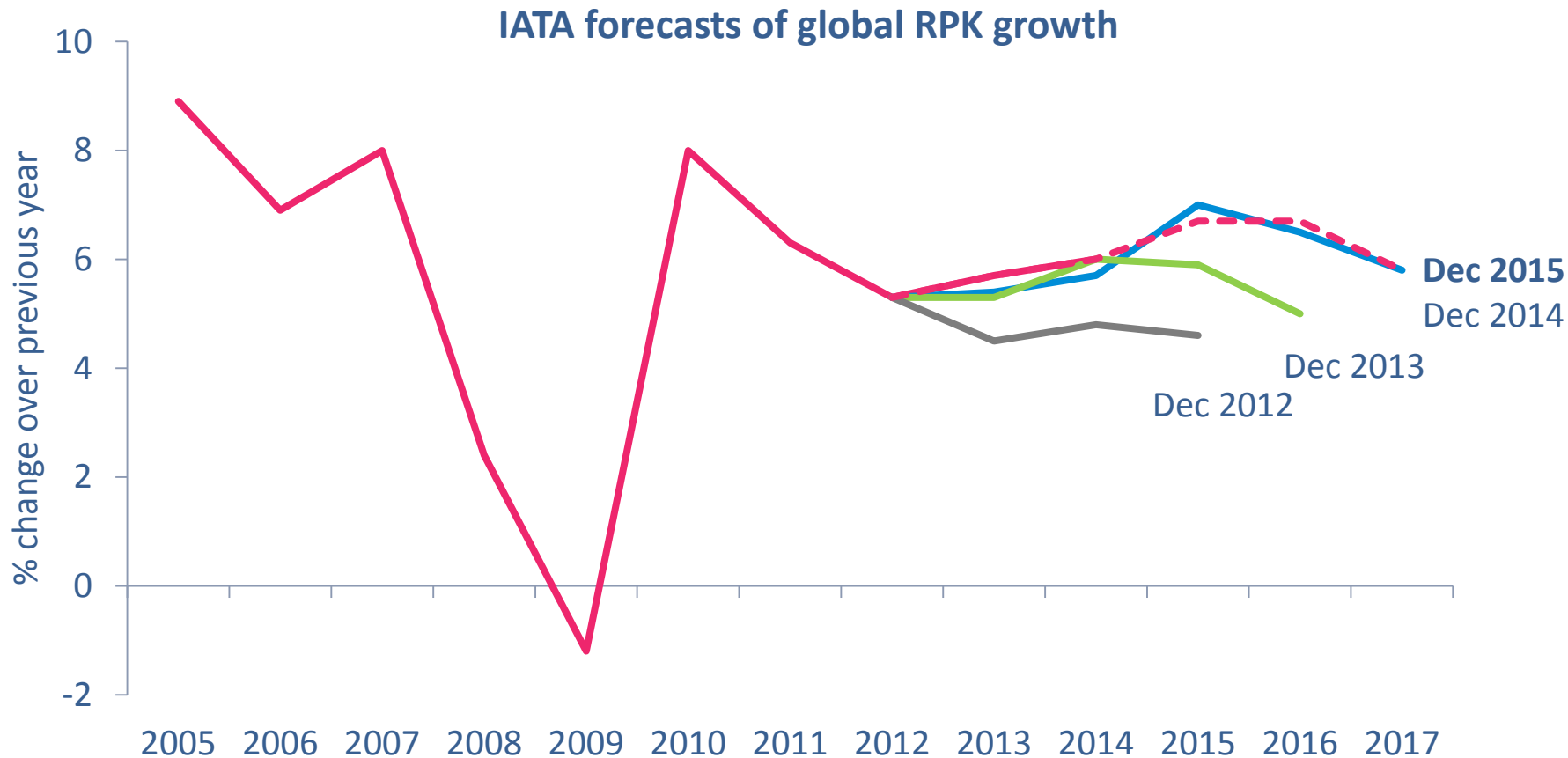
Finding new customer segments

Growth in world trade and (US) e-commerce sales

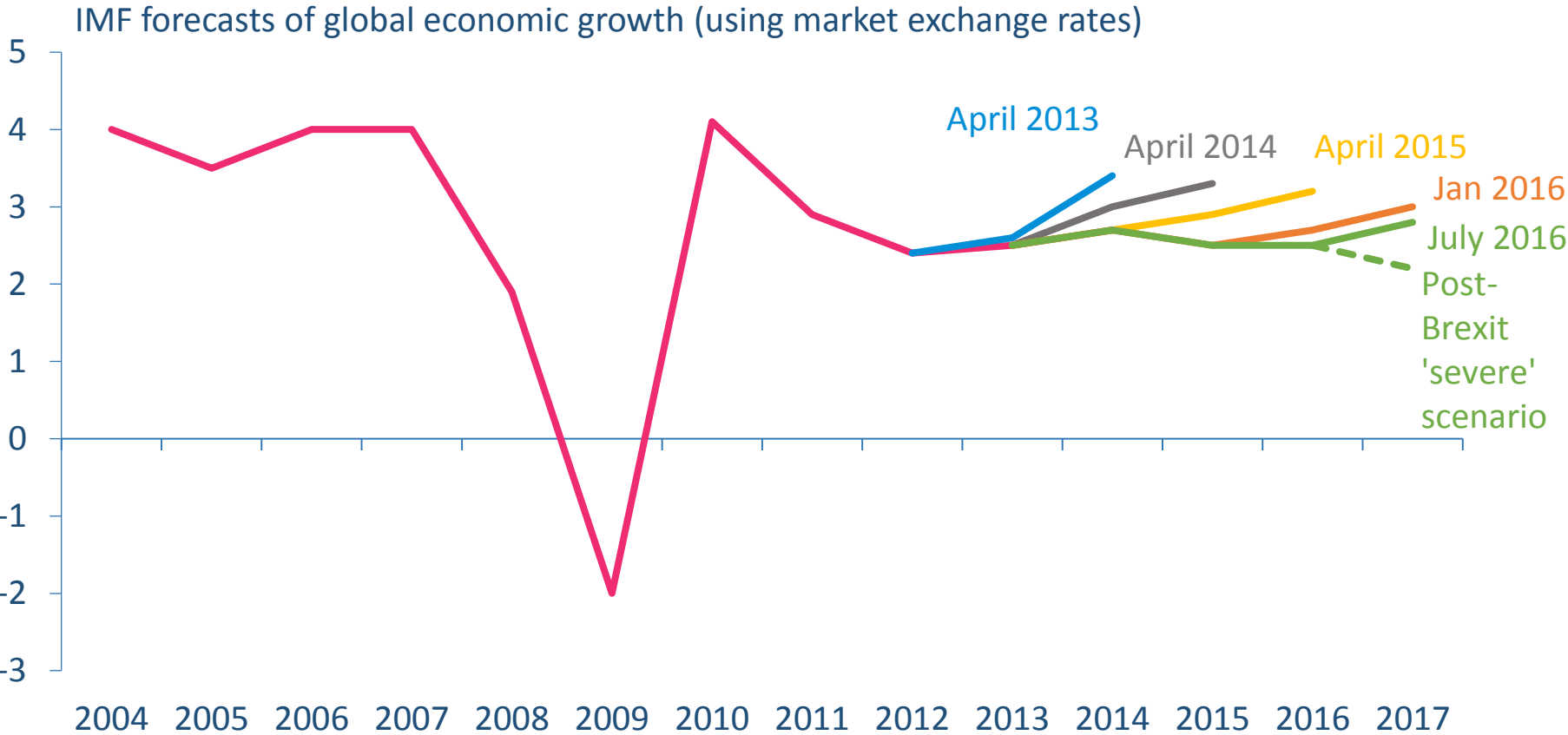


Source: IATA Economics using data from Netherlands CPB and Haver

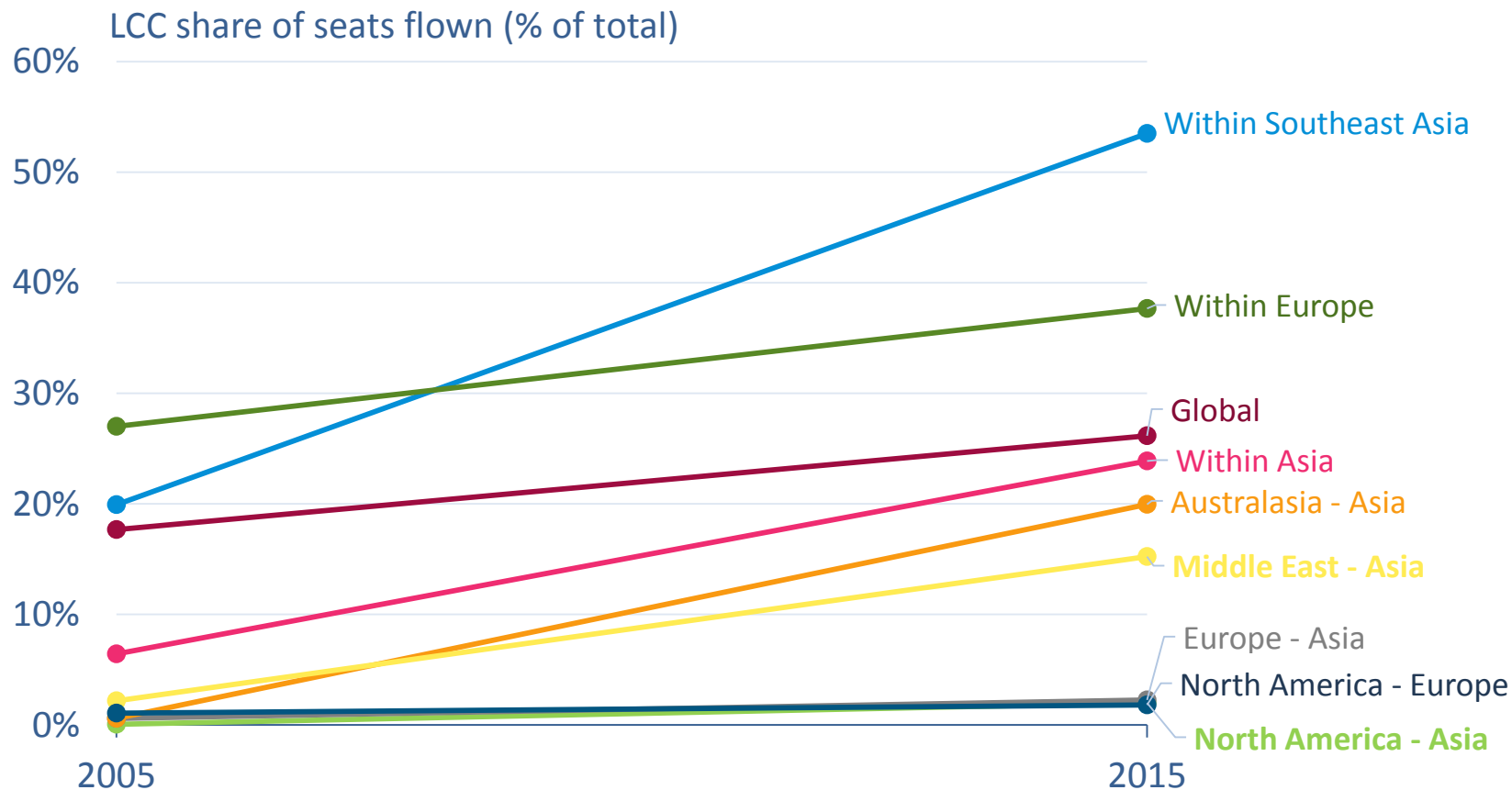
Air travel growth has remained strong



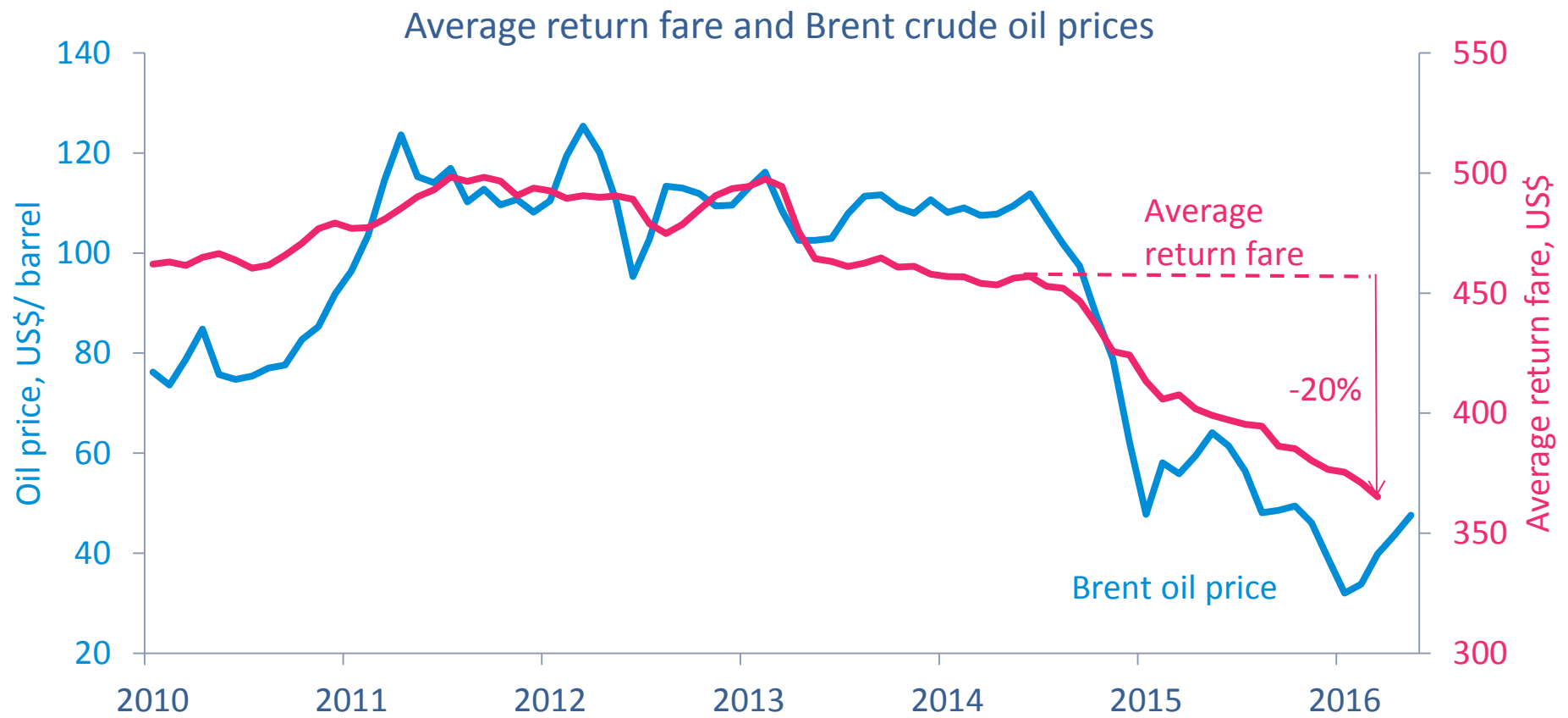
But world is stuck in a low economic growth path



Price stimulation from LCC entry in significant markets



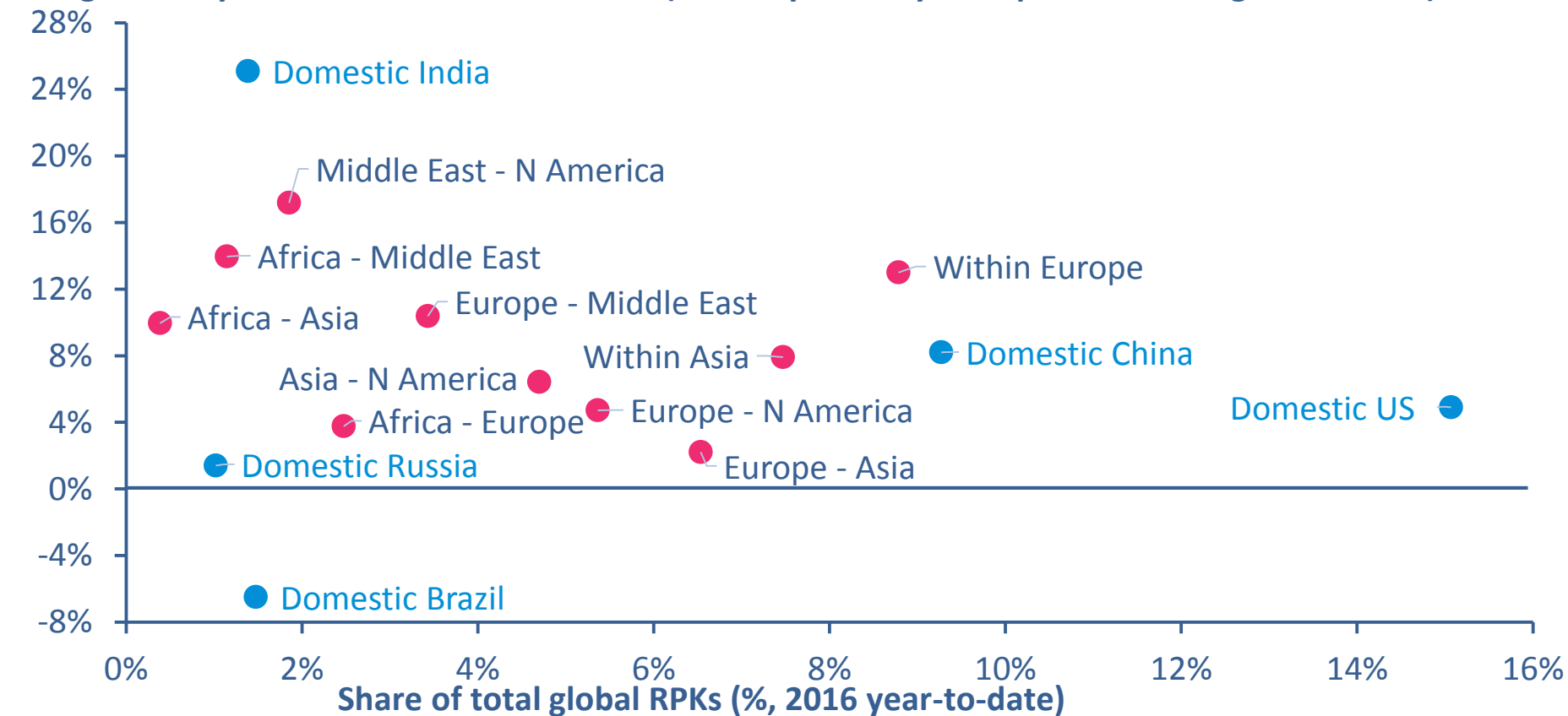
Significant price stimulation from fuel cost pass-through



Source: IATA using PaxIS+ and Haver data

But a very mixed picture across travel markets today

RPK growth by int'l route and dom. market (YTD, % year-on-year, up to March, segment-based)



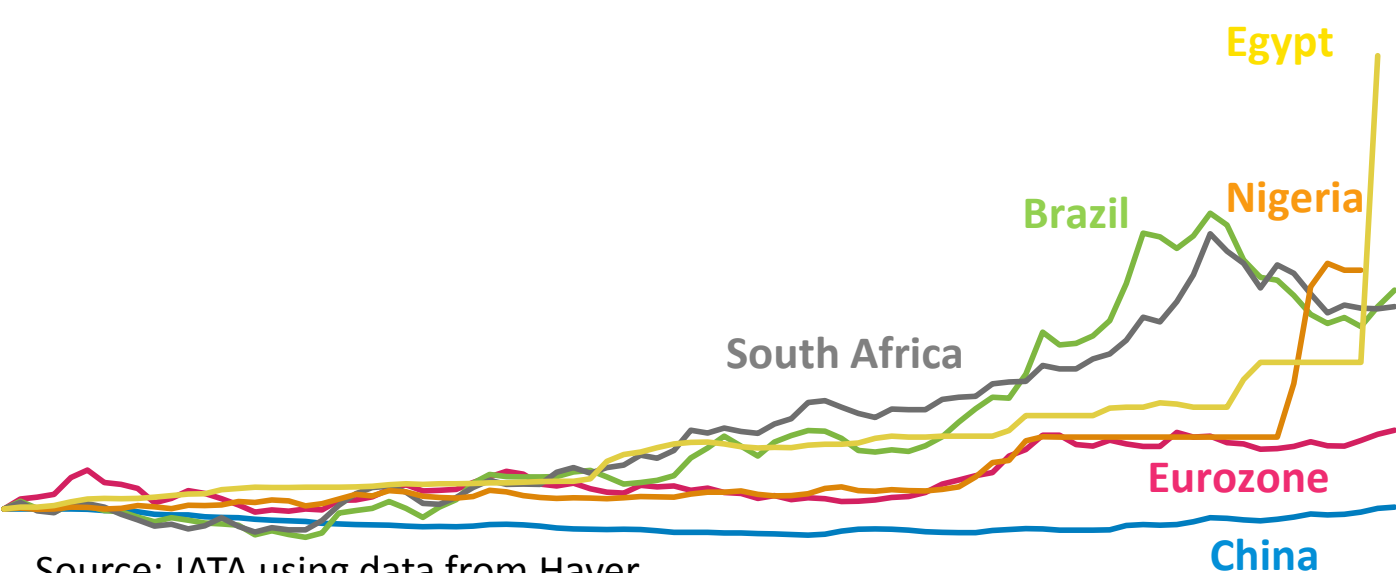
'Market' price elasticities depend on substitutes

Table 1: Estimated Price Elasticities of Passenger Demand

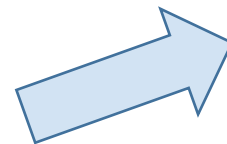
	Route/Market level		National level		Supra-national level	
	Short-haul	Long-haul	Short-haul	Long-haul	Short-haul	Long-haul
Intra N America	-1.5	-1.4	-0.9	-0.8	-0.7	-0.6
Intra Europe	-2.0	-2.0	-1.2	-1.1	-0.9	-0.8
Intra Asia	-1.5	-1.3	-0.8	-0.8	-0.6	-0.6
Intra Sub-Saharan Africa	-0.9	-0.8	-0.5	-0.5	-0.4	-0.4
Intra S America	-1.9	-1.8	-1.1	-1.0	-0.8	-0.8
Trans-Atlantic	-1.9	-1.7	-1.1	-1.0	-0.8	-0.7
Trans-Pacific	-0.9	-0.8	-0.5	-0.5	-0.4	-0.4
Europe-Asia	-1.4	-1.3	-0.8	-0.7	-0.6	-0.5

Coping with further US \$ strength

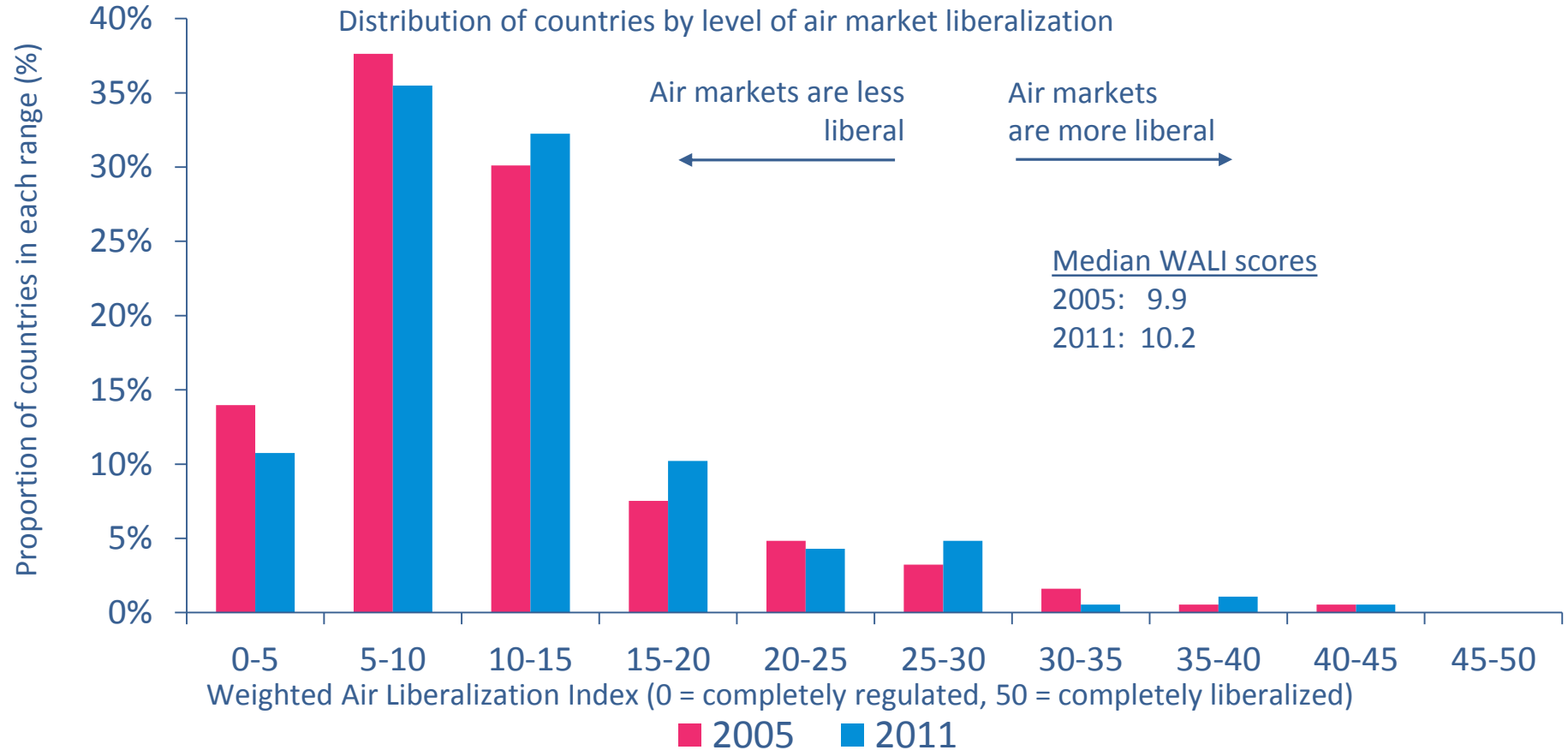
Exchange rates per US\$, indexed to equal 100 in 2010



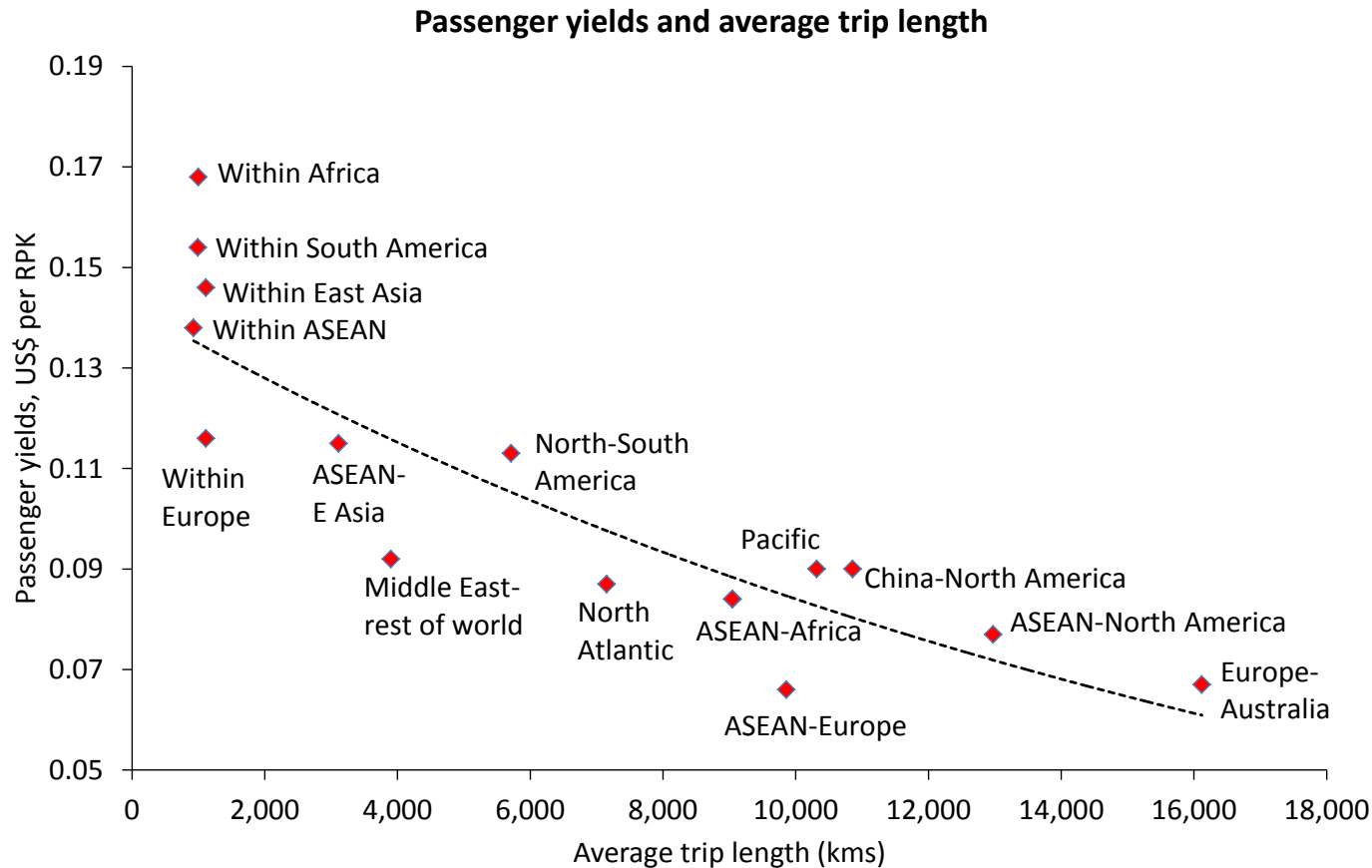
Source: IATA using data from Haver



There is also still a lot of pent-up demand (and supply)

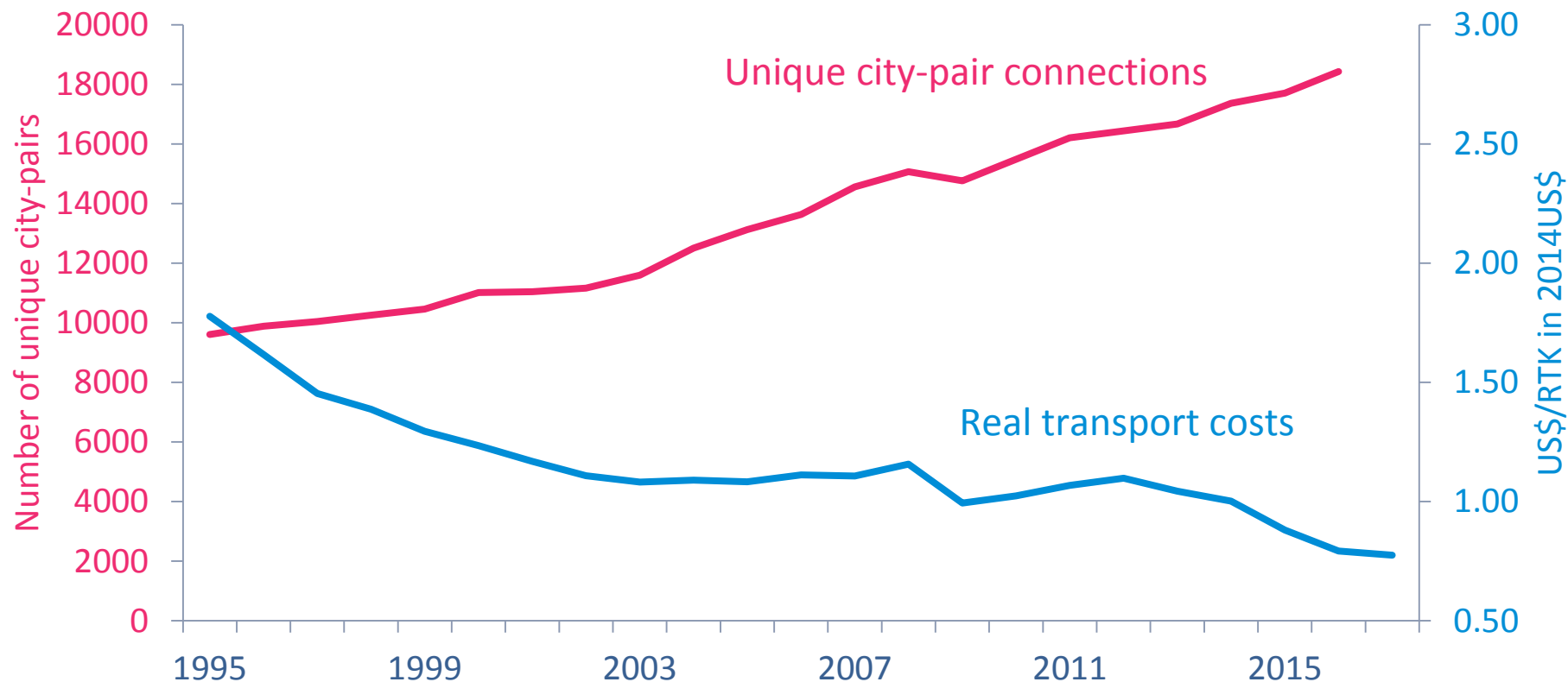


Scope for large price change in short-haul markets

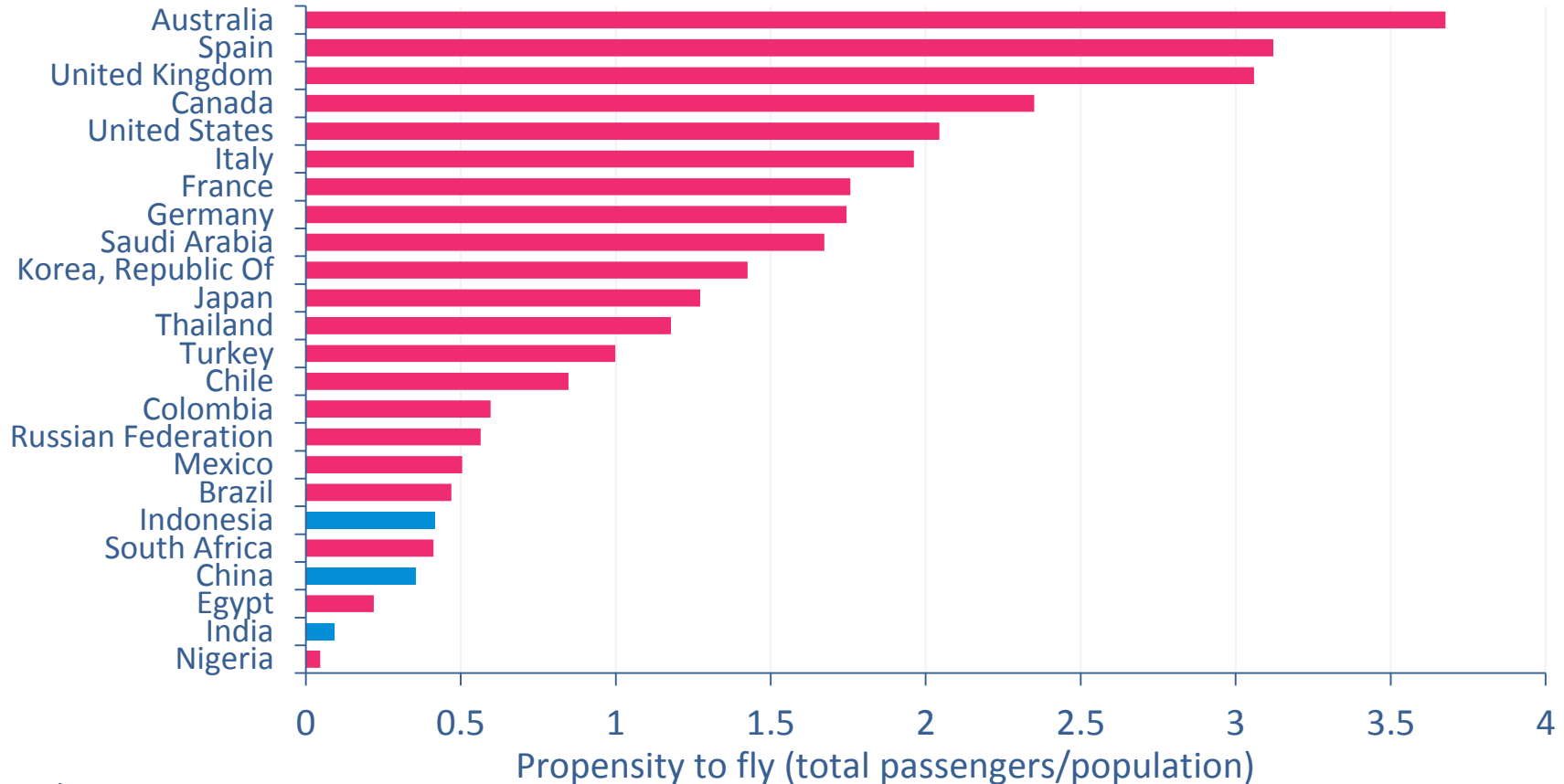


Generalized costs about time as well as fares

Unique city-pairs and real transport costs

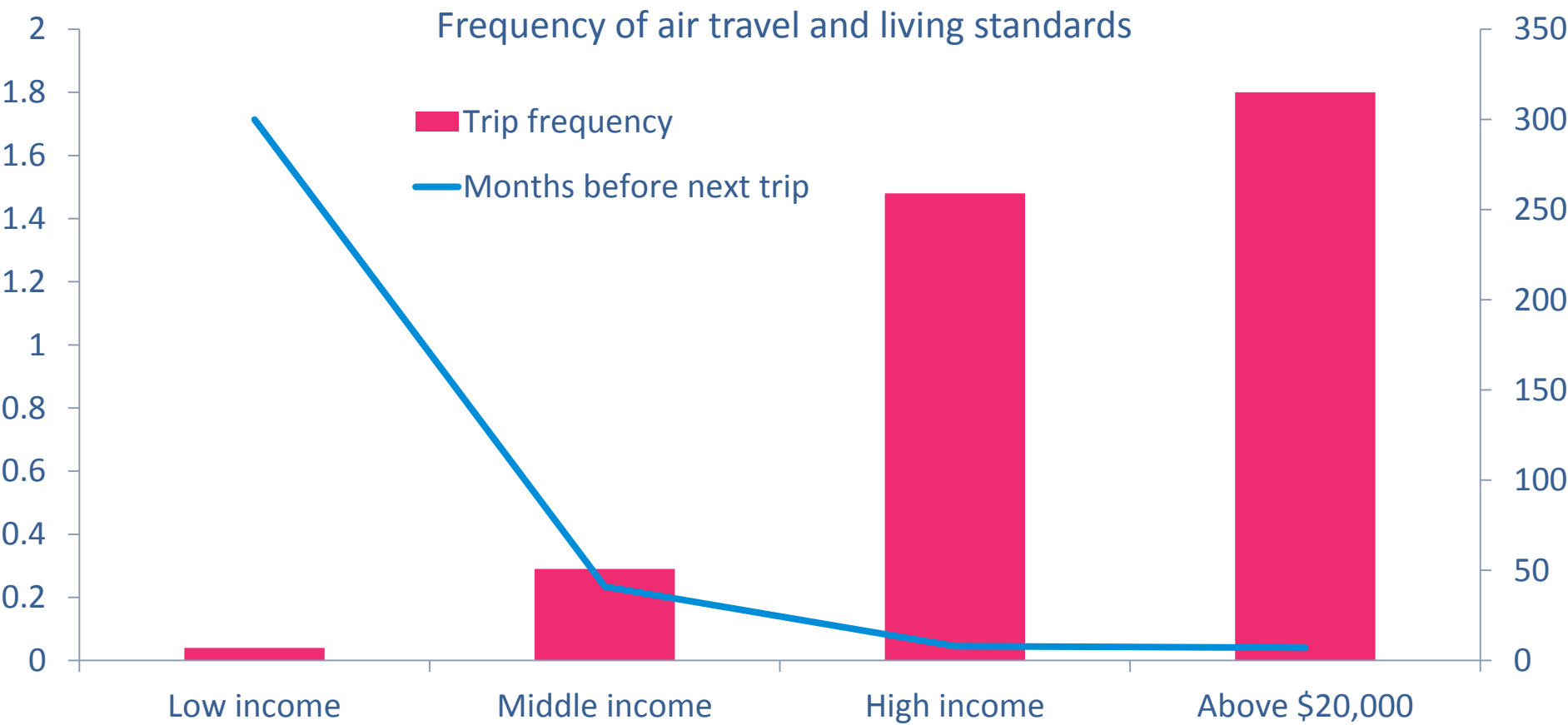


Trip frequency still low in many important markets

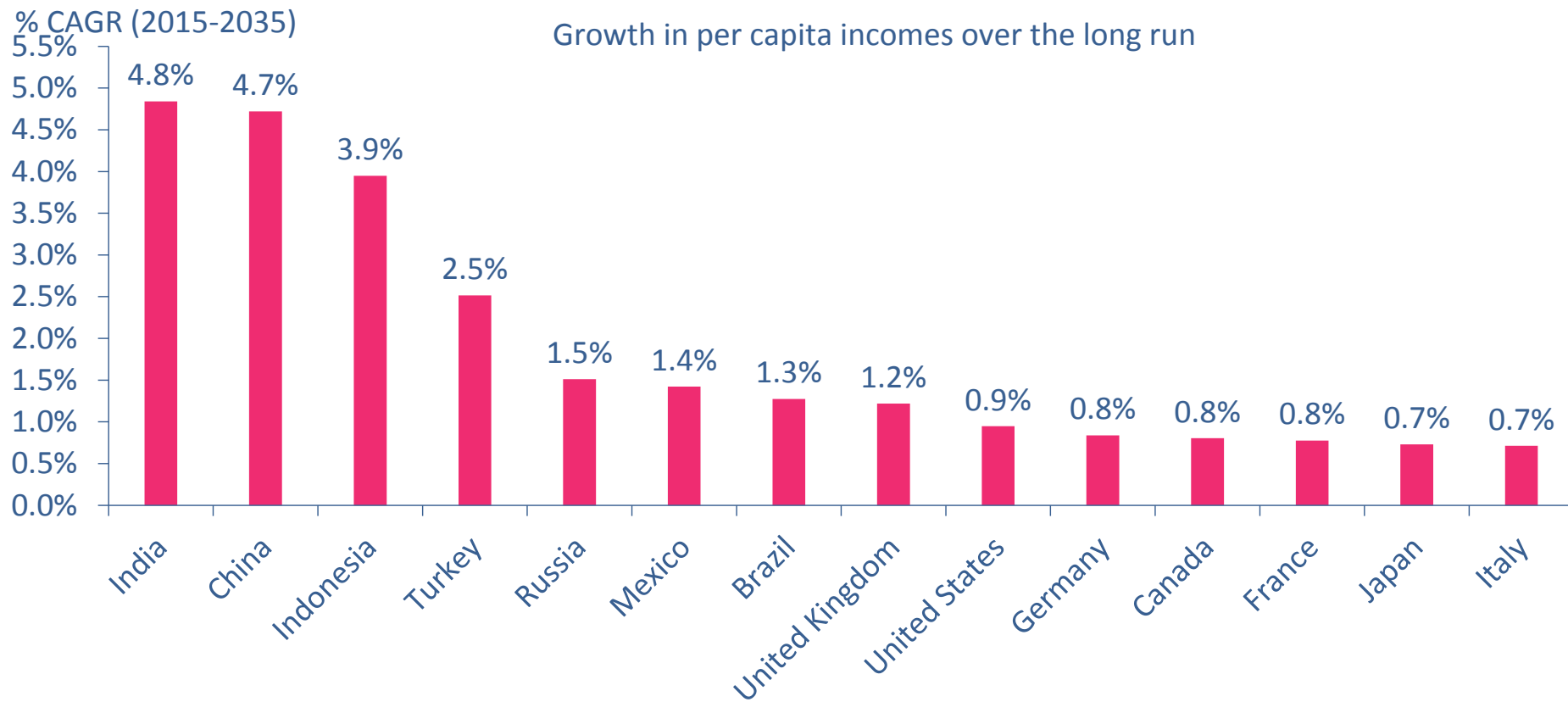


Source: IATA/Tourism Economics Air Passenger Forecasts, September 2016

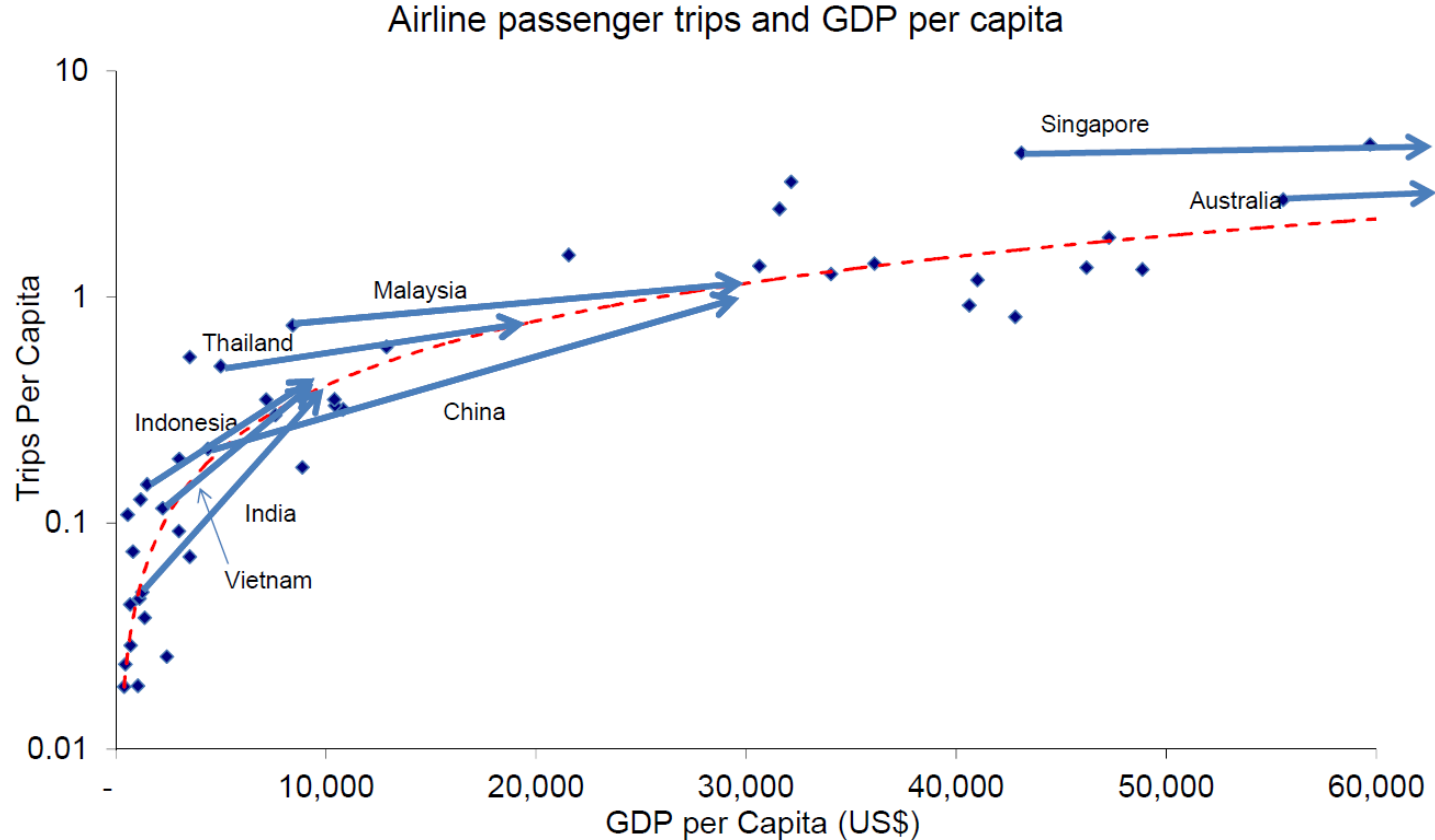
Living standards make big difference to travel frequency



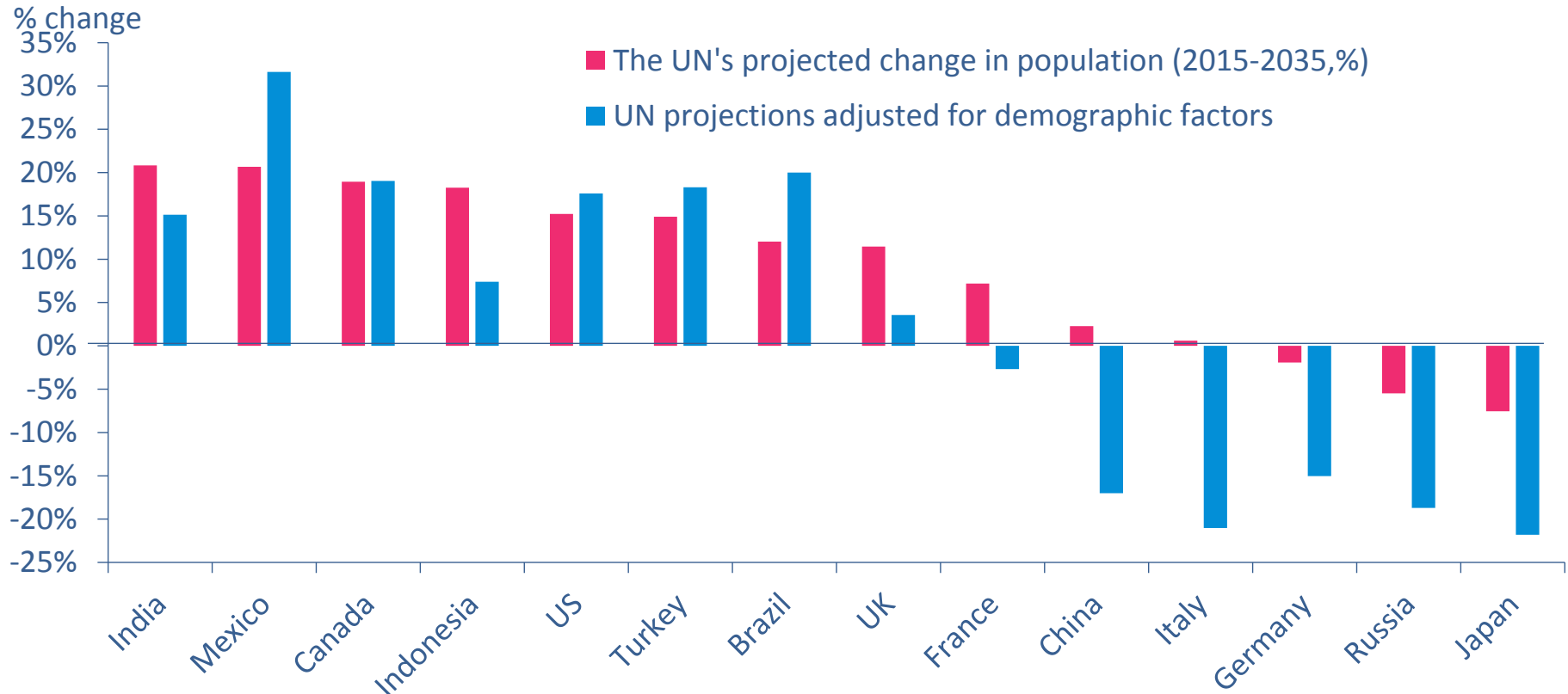
Living standards still have much room for catch-up



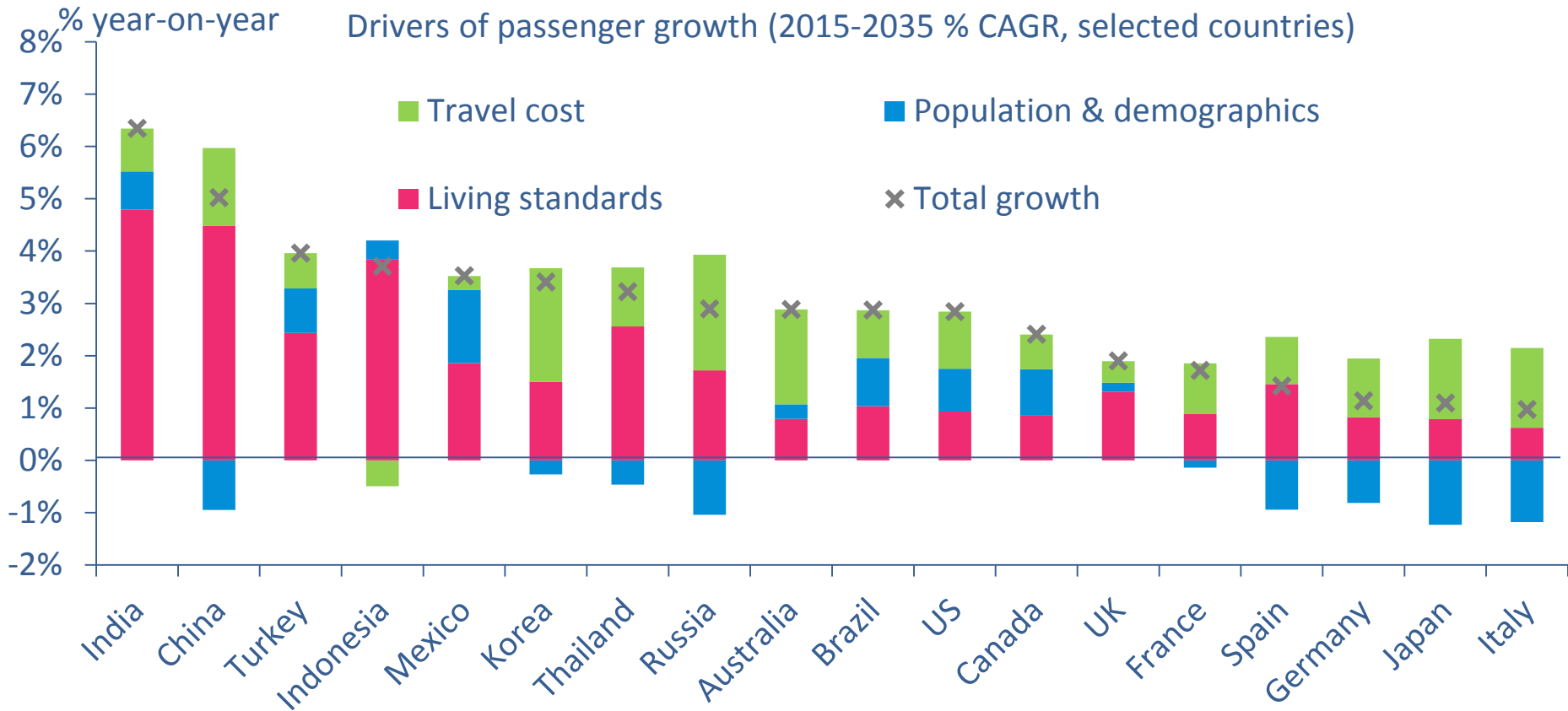
Large potential in populous but (currently) poor markets



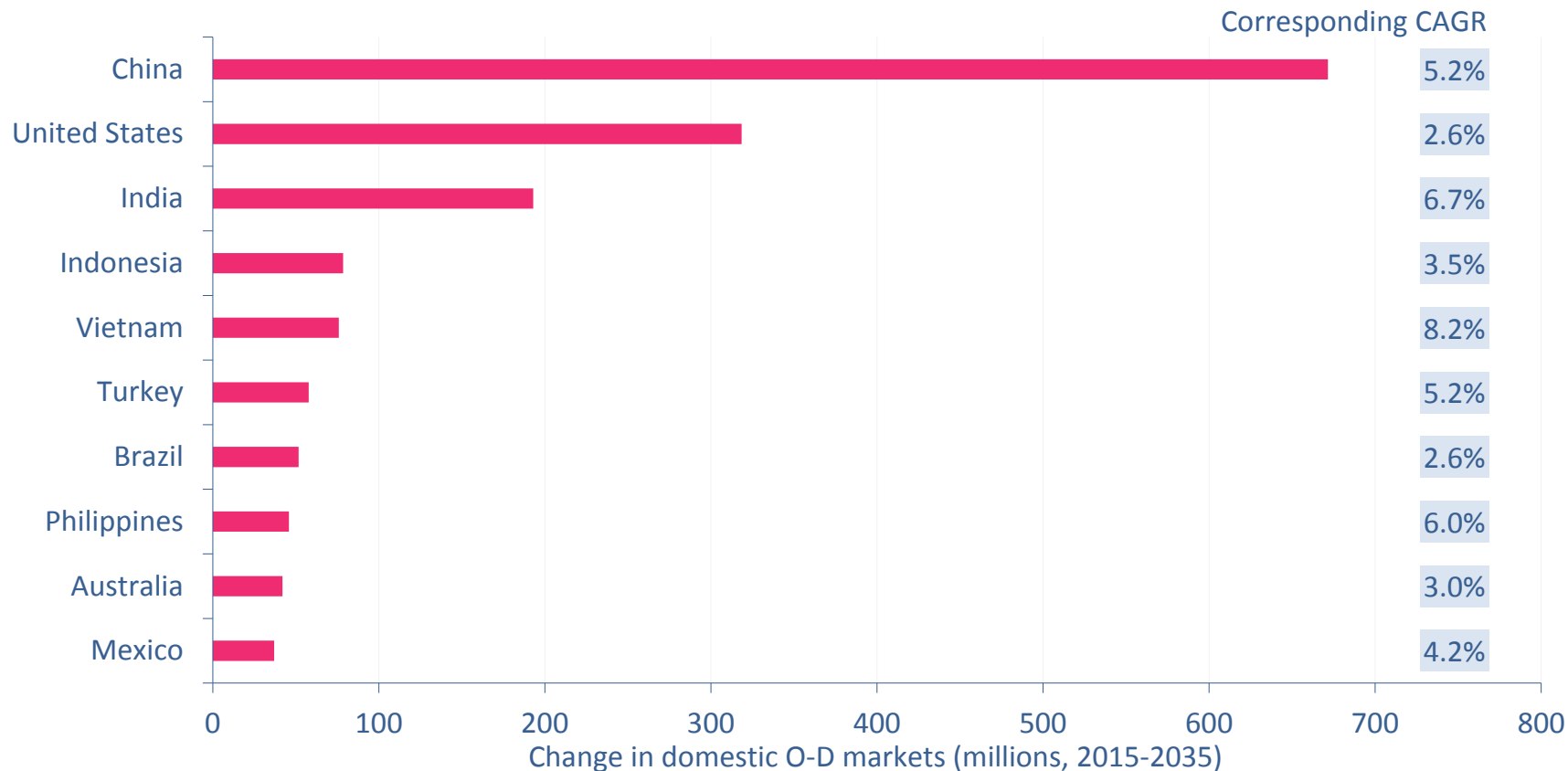
Demographics strong in some key markets, adverse in others



Wide range of growth expected over next 20 years



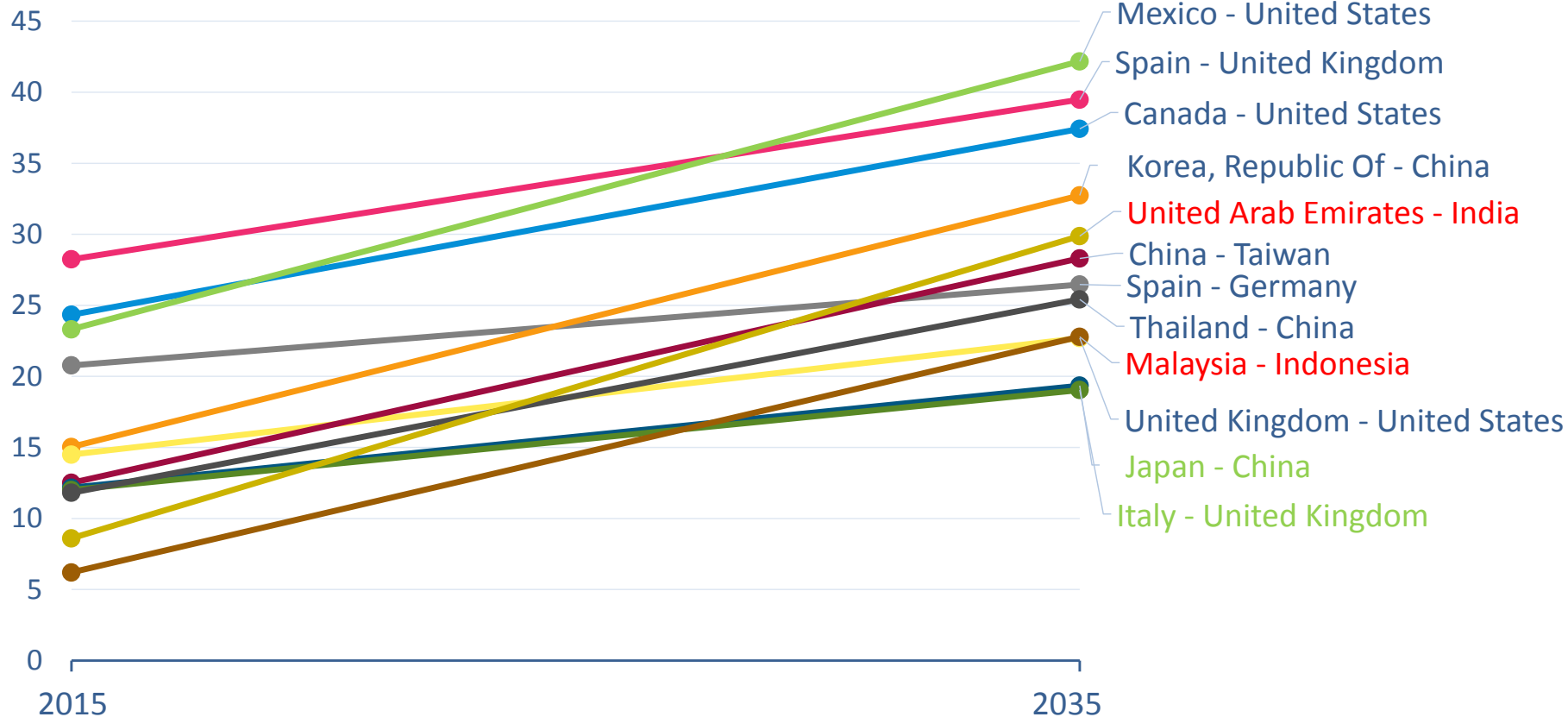
China largest increment, but don't dismiss the US



Source: IATA/Tourism Economics Air Passenger Forecasts, September 2016

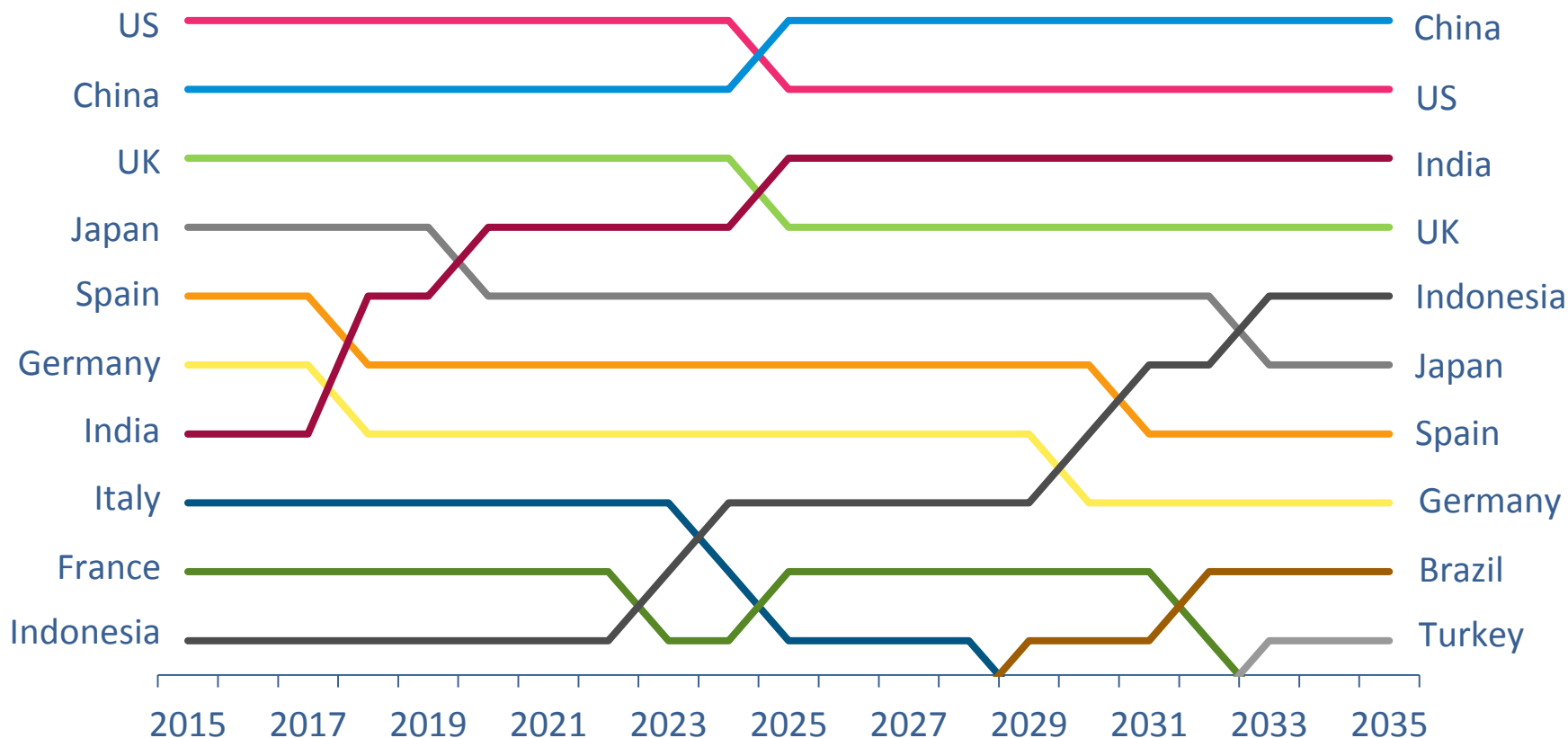
New top international country-pair markets emerging

Millions



Source: IATA using data from TE/IATA Air Passenger Forecasts, October 2016

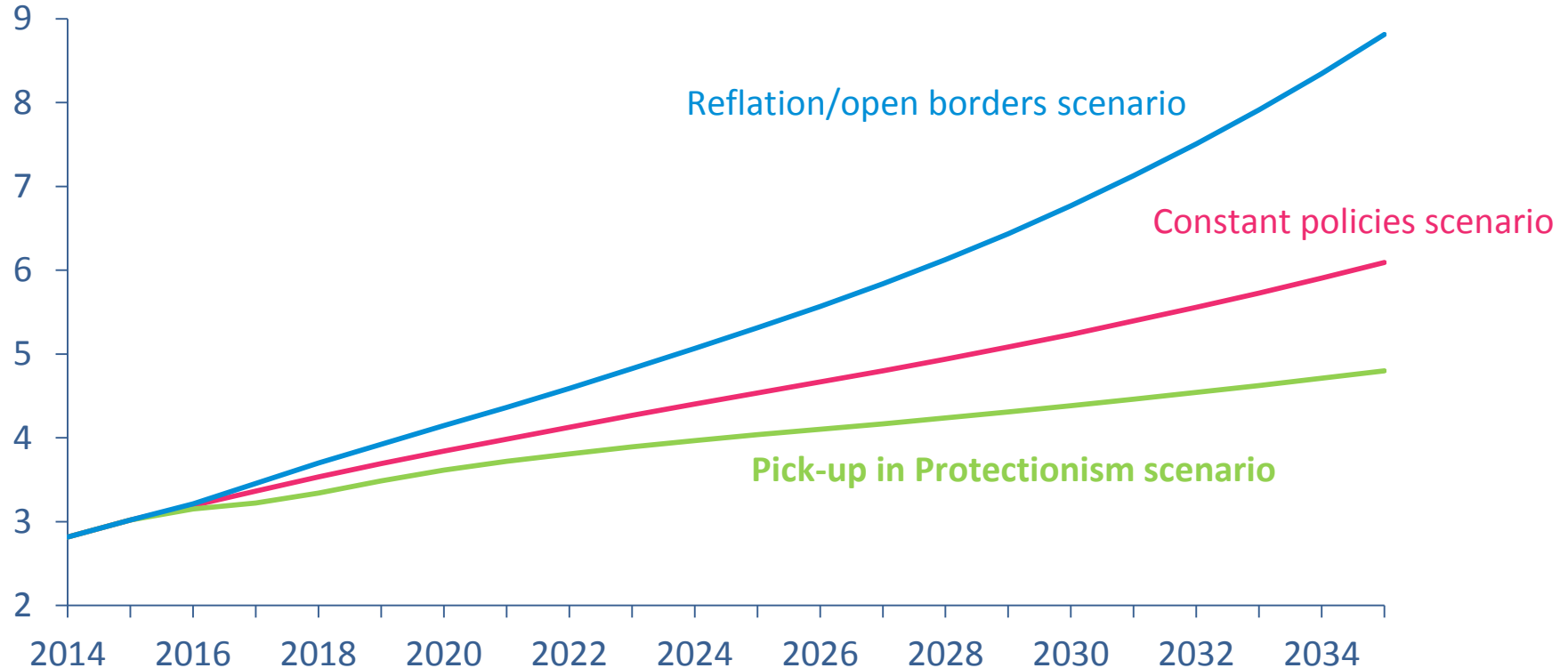
Significant change in top-10 in air travel over next 20 years



Source: IATA/Tourism Economics Air Passenger Forecasts, September 2016

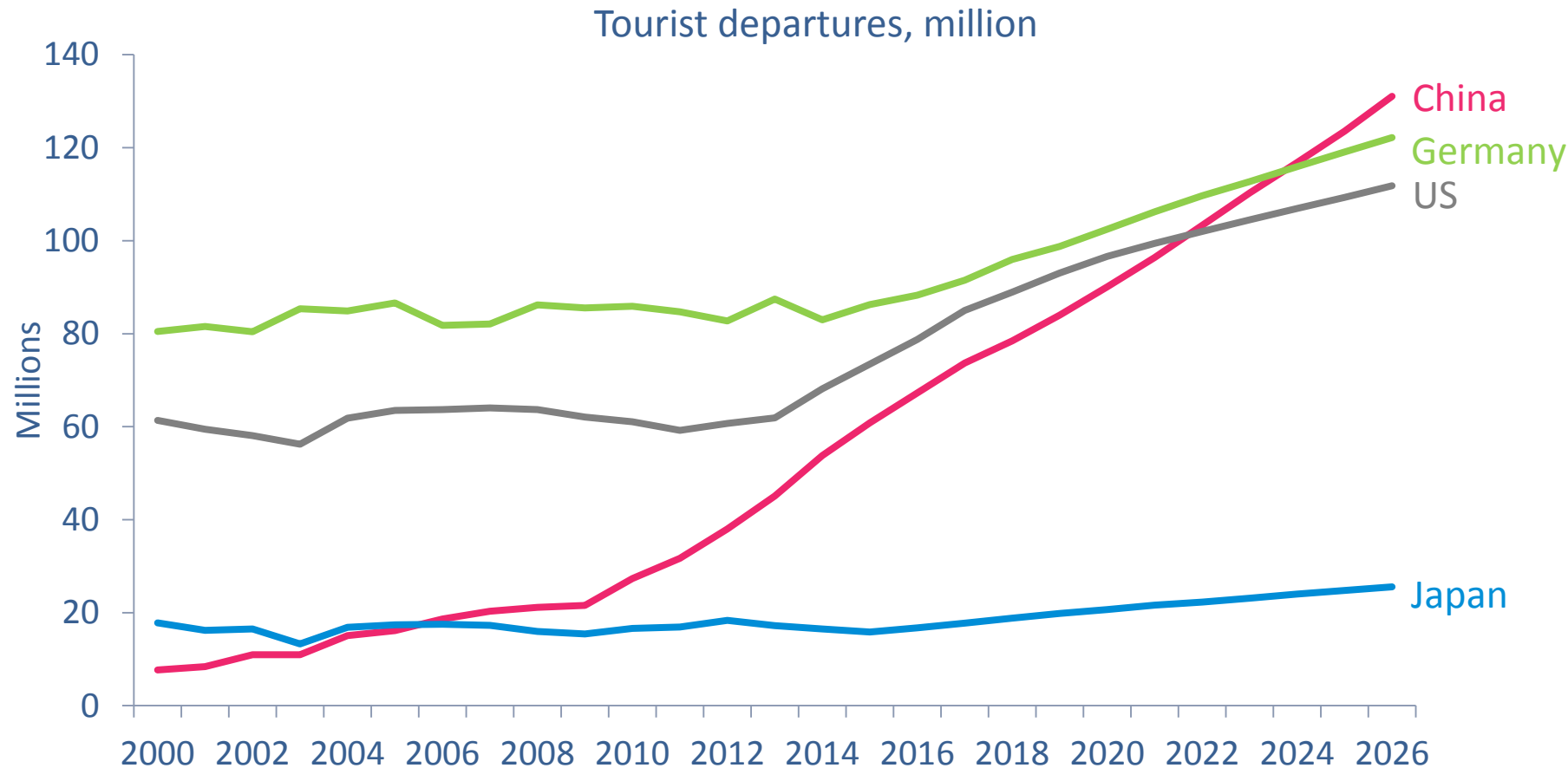
Long-term travel growth even in gloomy macro scenario

Global O-D passenger journeys (billion)



Source: IATA/Tourism Economics Air Passenger Forecasts, September 2016

Chinese tourist outflows begin to dominate



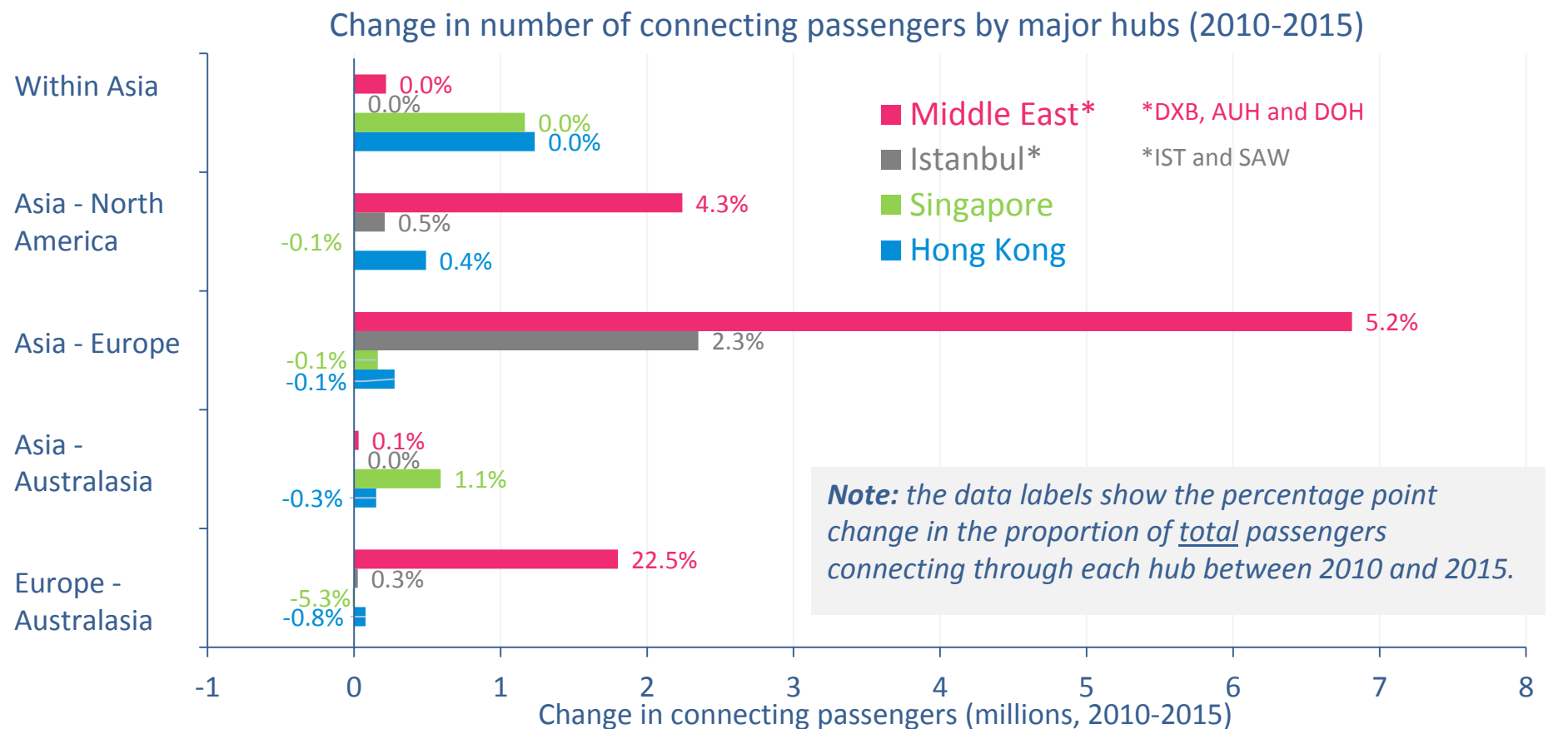
Source: IATA Economics using data from Tourism Economics' Decision Metrics database

Centre of gravity of air travel shifting fast towards China



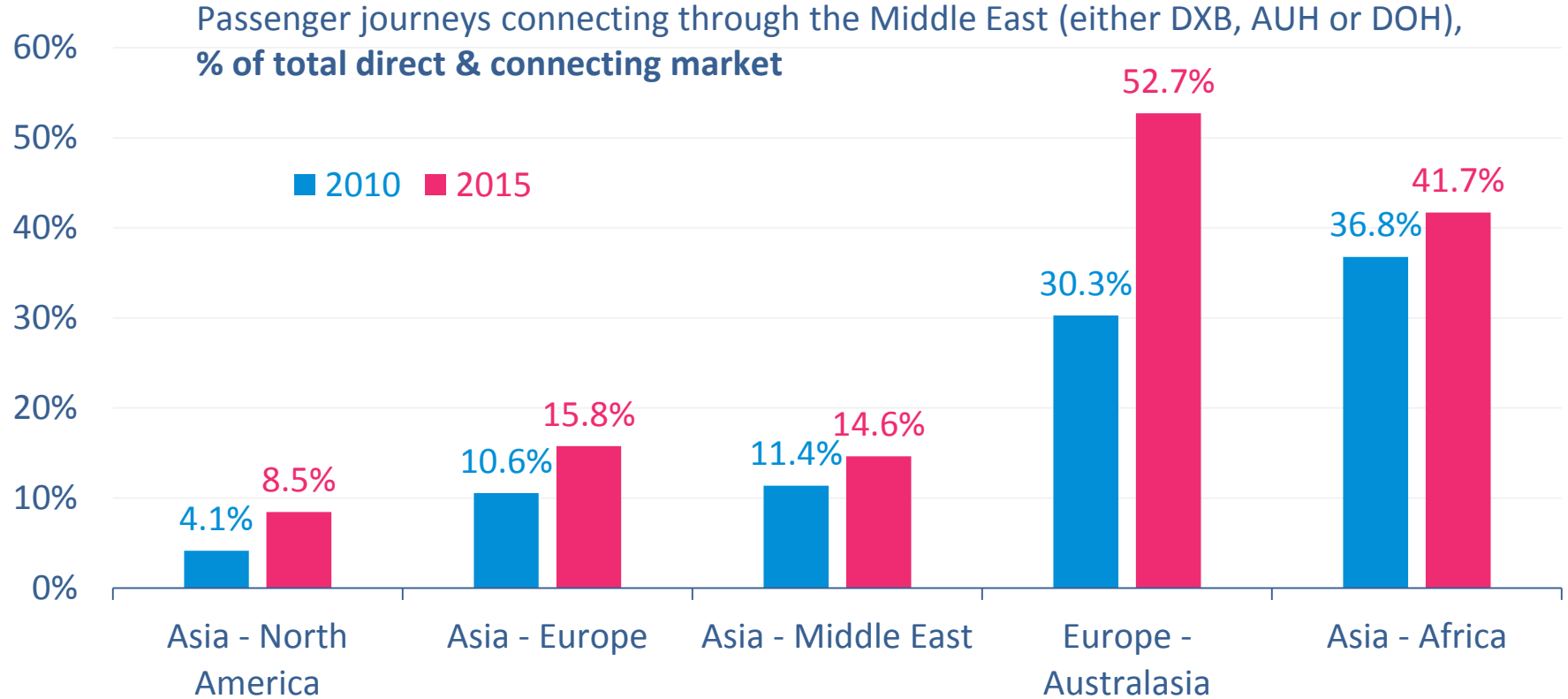
Source: IATA Economics using data from PaxIS+

Connecting market shares stable - but Gulf/TK threat



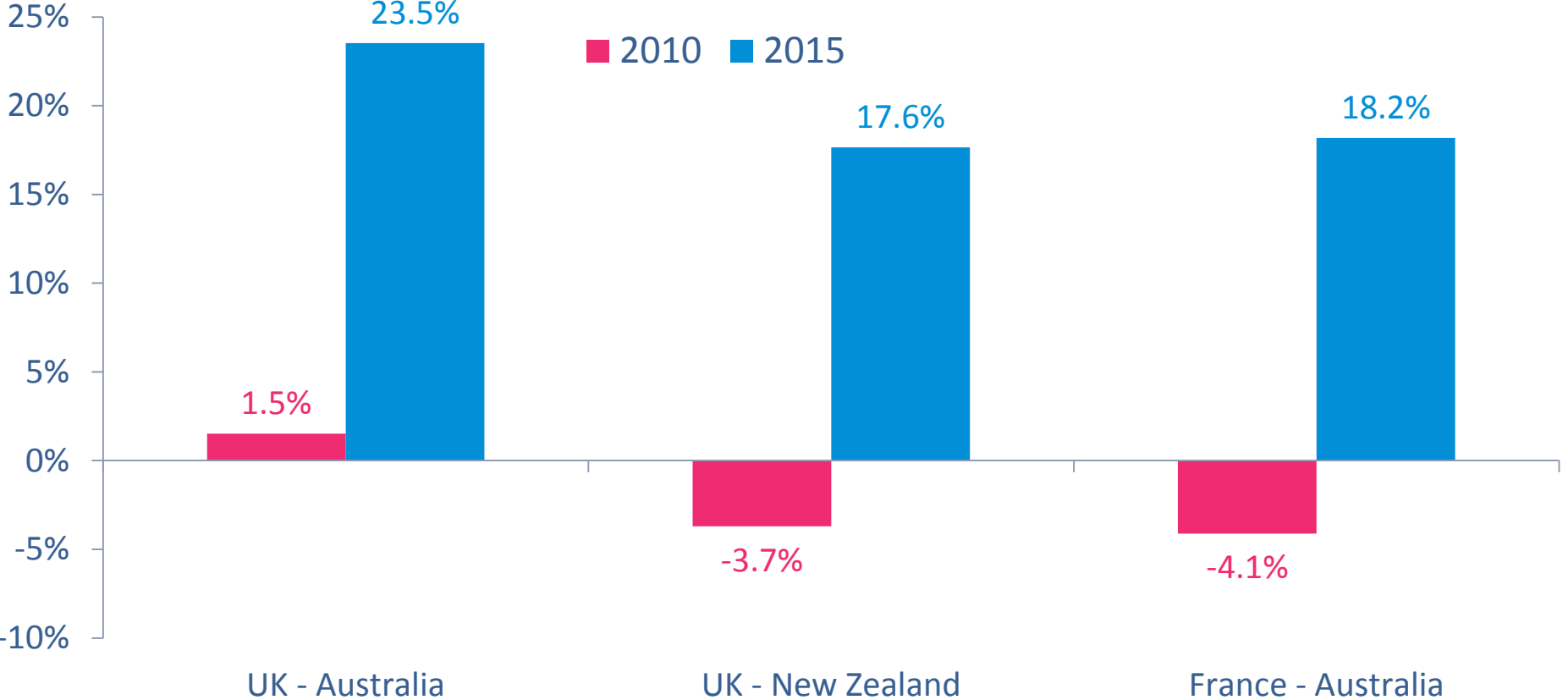
Sources: IATA using PaxIS+ data

Gulf hubs starting to dominate some markets



Price competitiveness issue on these markets

Yield premium for connecting through Hong Kong versus Gulf hubs



Sources: IATA using PaxIS+ data

The air transport paradox

Revenue growth¹

Industry total for each year, 2004 - 13 CAGR, percent

Healthcare equipment and services	6.2
Rail	6.2
Airlines	6.1
Energy	6.0
Tech hardware and equipment	5.8
Materials	5.2
Software and services	4.7
Utilities	4.6
Freight forwarding	4.5
Capital goods	4.3
Economy	4.3
Pharma, biotech, and life sciences	4.2
Retailing	4.1
Food, beverage, and tobacco	3.9
Food and staples retail	3.8
Transportation & logistics	3.6
Trucking	3.4
Contract logistics	3.4
Household and personal	3.3
Telecom	3.3
Shipping	3.0
Semiconductors and equipment	2.8
Communications and professional services	2.6
Consumer services	2.4
Consumer durables and apparel	2.4
Bus	2.2
Automobiles and components	2.1
Postal/CEP	1.6
Media	1.4

ROIC² excluding goodwill (average)

Industry aggregate, 2004 - 13 simple average, percent

Software and services	94.7
Pharma, biotech, and life sciences	45.7
Household and personal	36.4
Healthcare equipment and services	33.9
Media	30.7
Food, beverage, and tobacco	26.8
Tech hardware and equipment	24.7
Communications and professional services	21.9
Semiconductors and equipment	21.5
Telecom	20.6
Postal/CEP	16.6
Consumer services	15.7
Retailing	15.7
Consumer durables and apparel	15.6
Economy	13.9
Capital goods	13.6
Bus	13.6
Food and staples retail	13.3
Energy	12.7
Materials	12.4
Contract logistics	12.4
Freight forwarding	12.3
Rail	8.1
Shipping	7.7
Transportation & logistics	7.5
Automobiles and components	6.8
Trucking	6.4
Utilities	6.1
Airlines	4.0

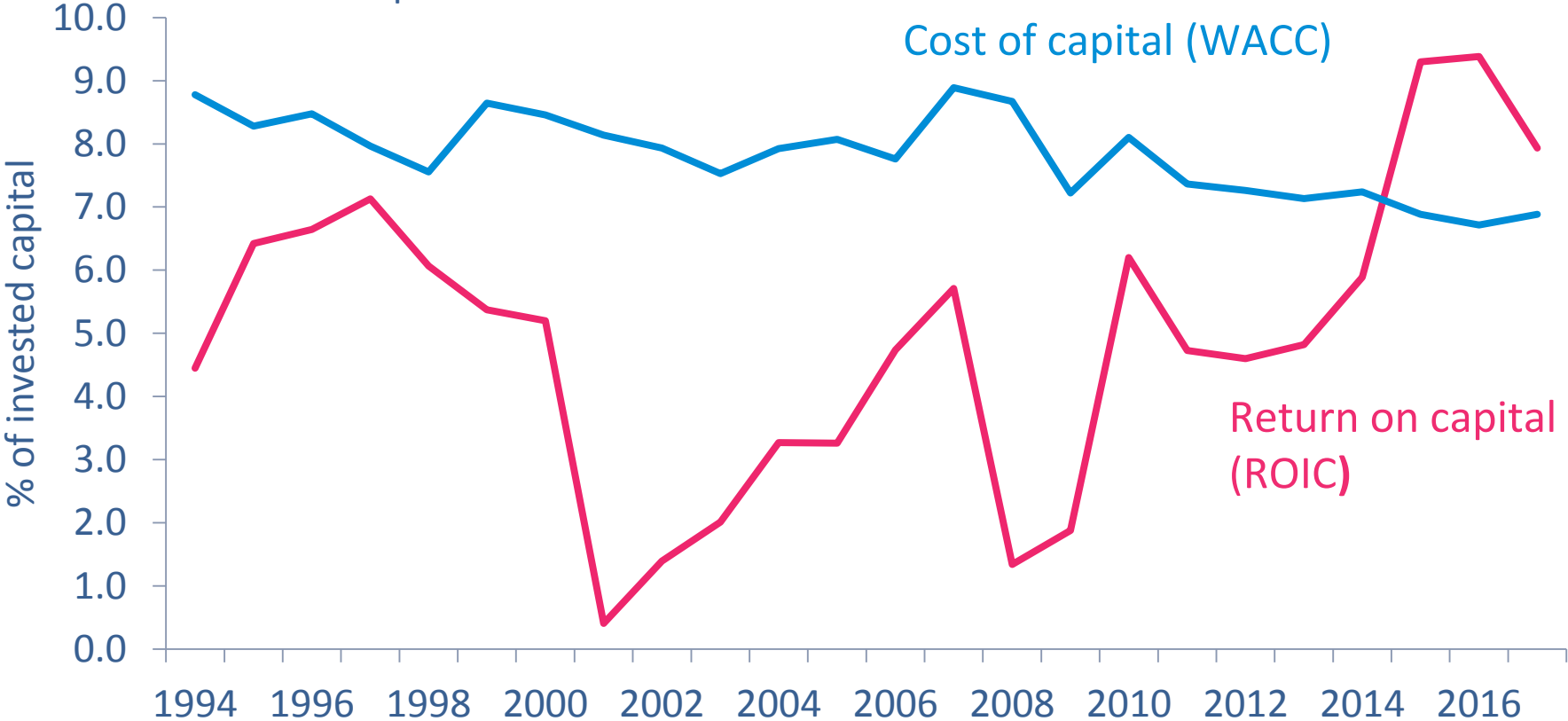
¹ Real revenue growth, 2004 - 13 CAGR inflation adjusted, median for industry

² ROIC after tax, excluding goodwill; excludes outliers

Source: McKinsey presentation to IATA

At last investors are getting a 'normal' return

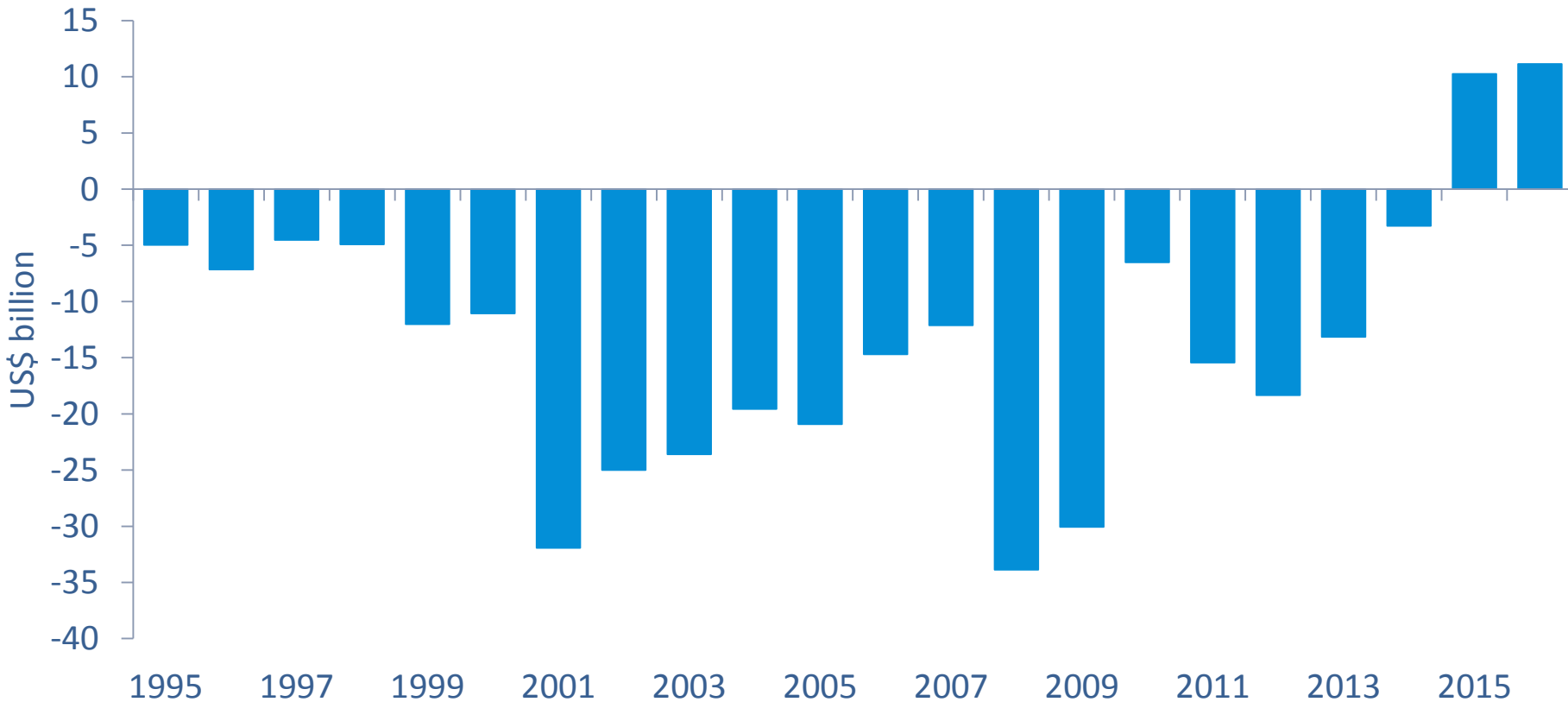
Return on capital invested in airlines



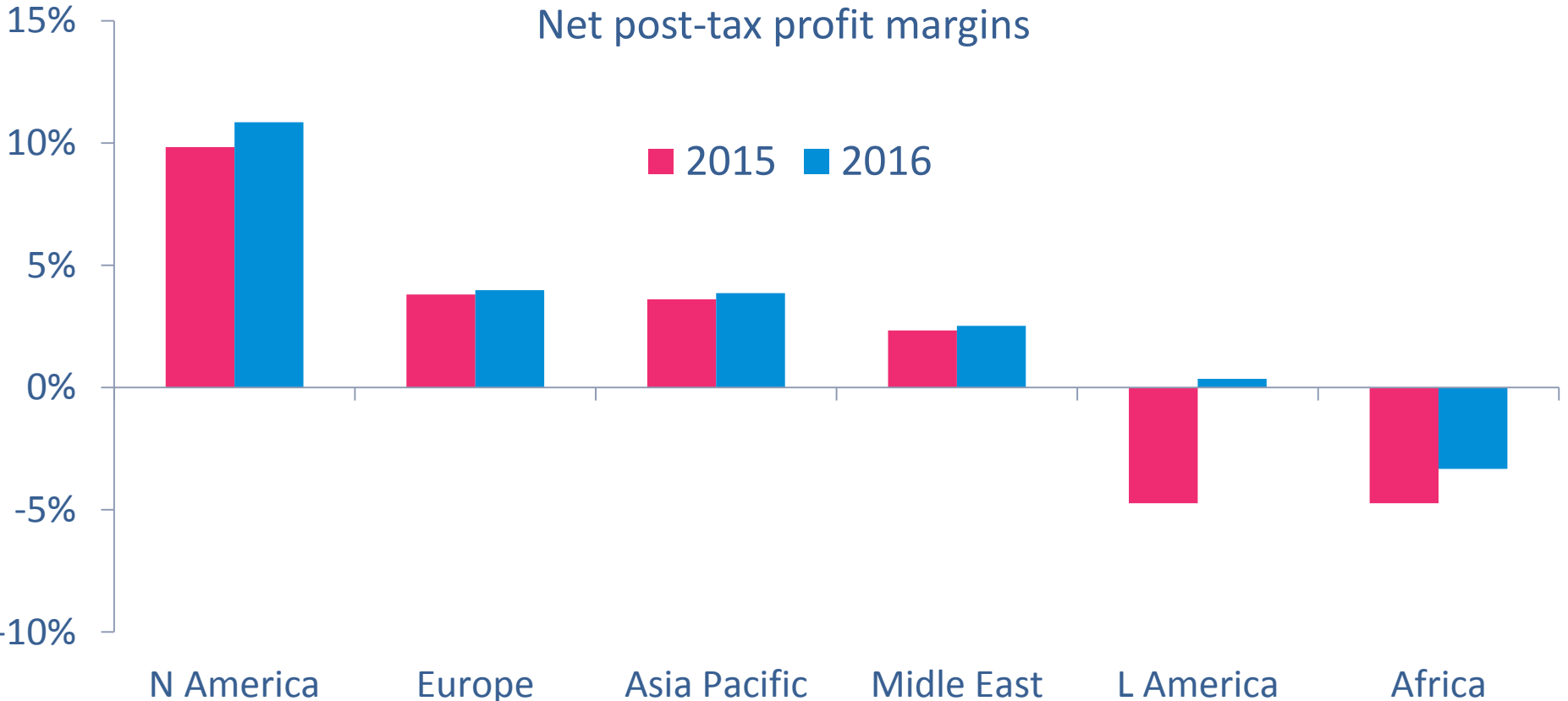
Source: IATA Economic Performance of the Airline Industry, End-Year 2016 report

Ending decades of investor capital destruction (?)

Difference between investing in airlines and investing in similar assets elsewhere

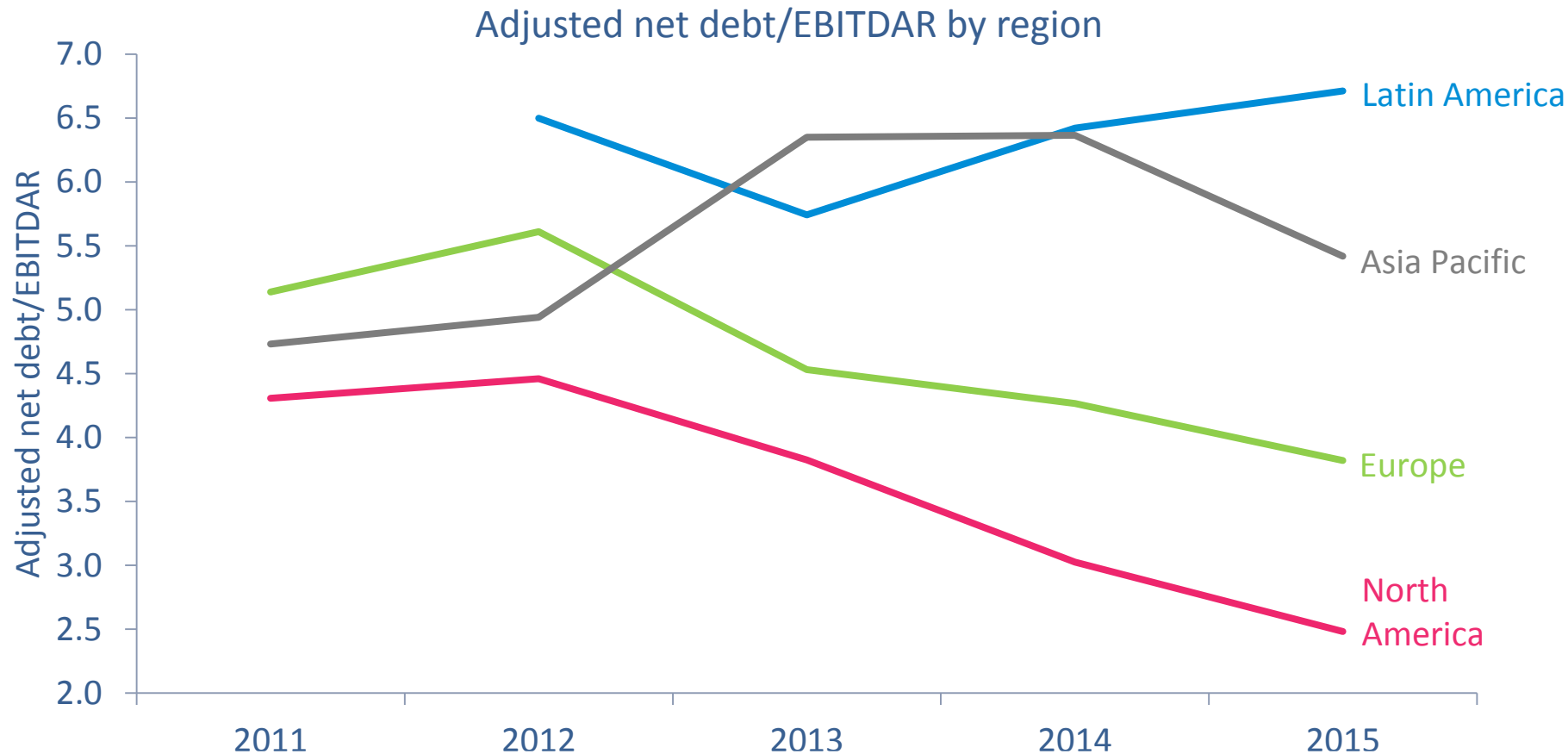


But airline profitability still challenged outside the US



Source: IATA Economic Performance of the Airline Industry, End-Year 2016 report

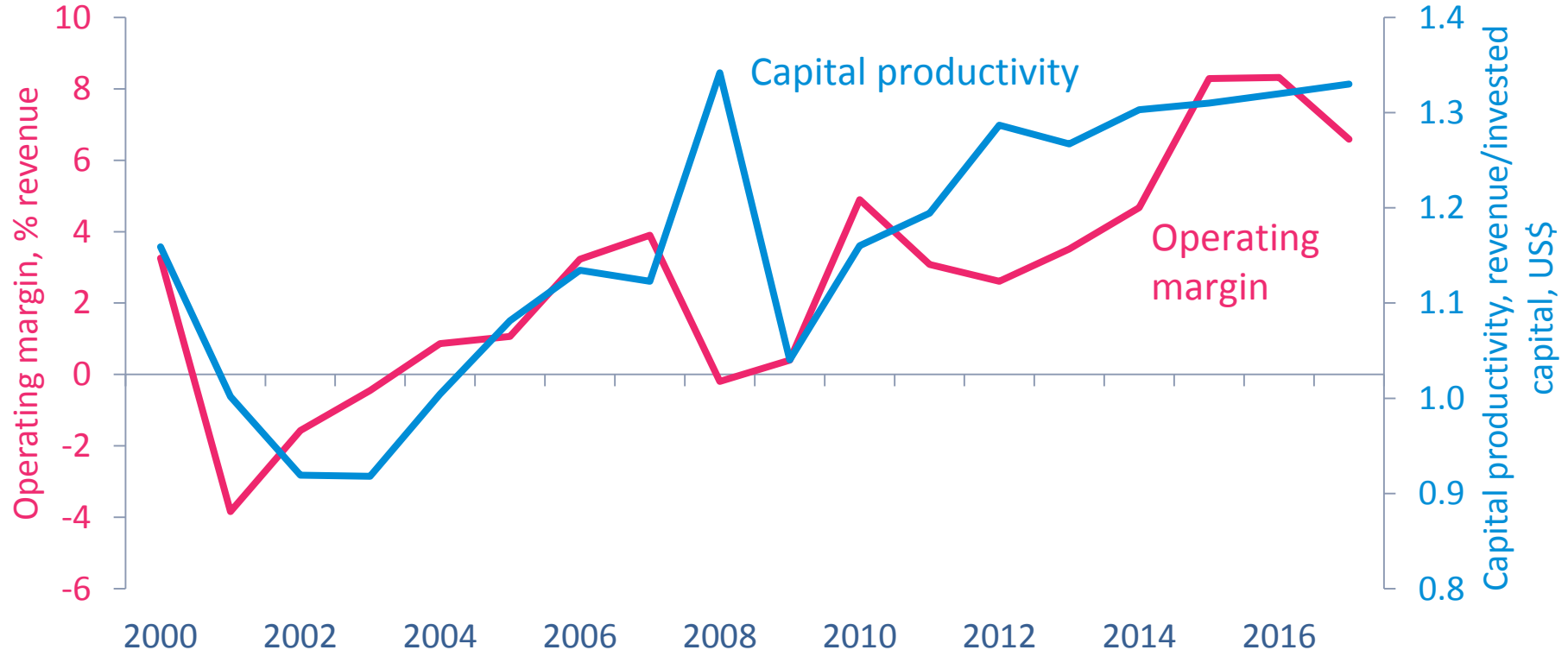
Balance sheets in some regions remain weak



Source: IATA Economic Performance of the Airline Industry, End-Year 2016 report

Solid improvement in capital productivity

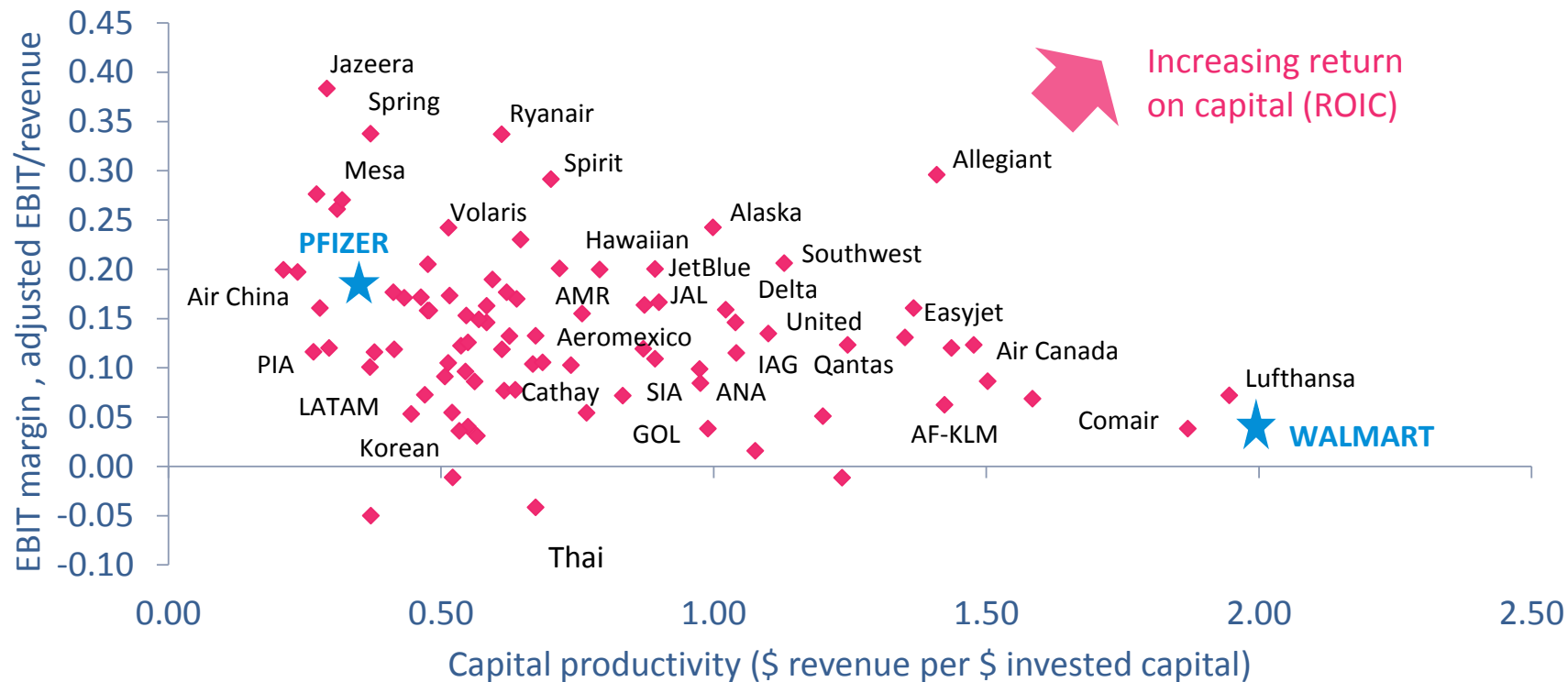
Airlines' operating or EBIT margin and capital productivity



Source: IATA Economic Performance of the Airline Industry – end year 2016 report

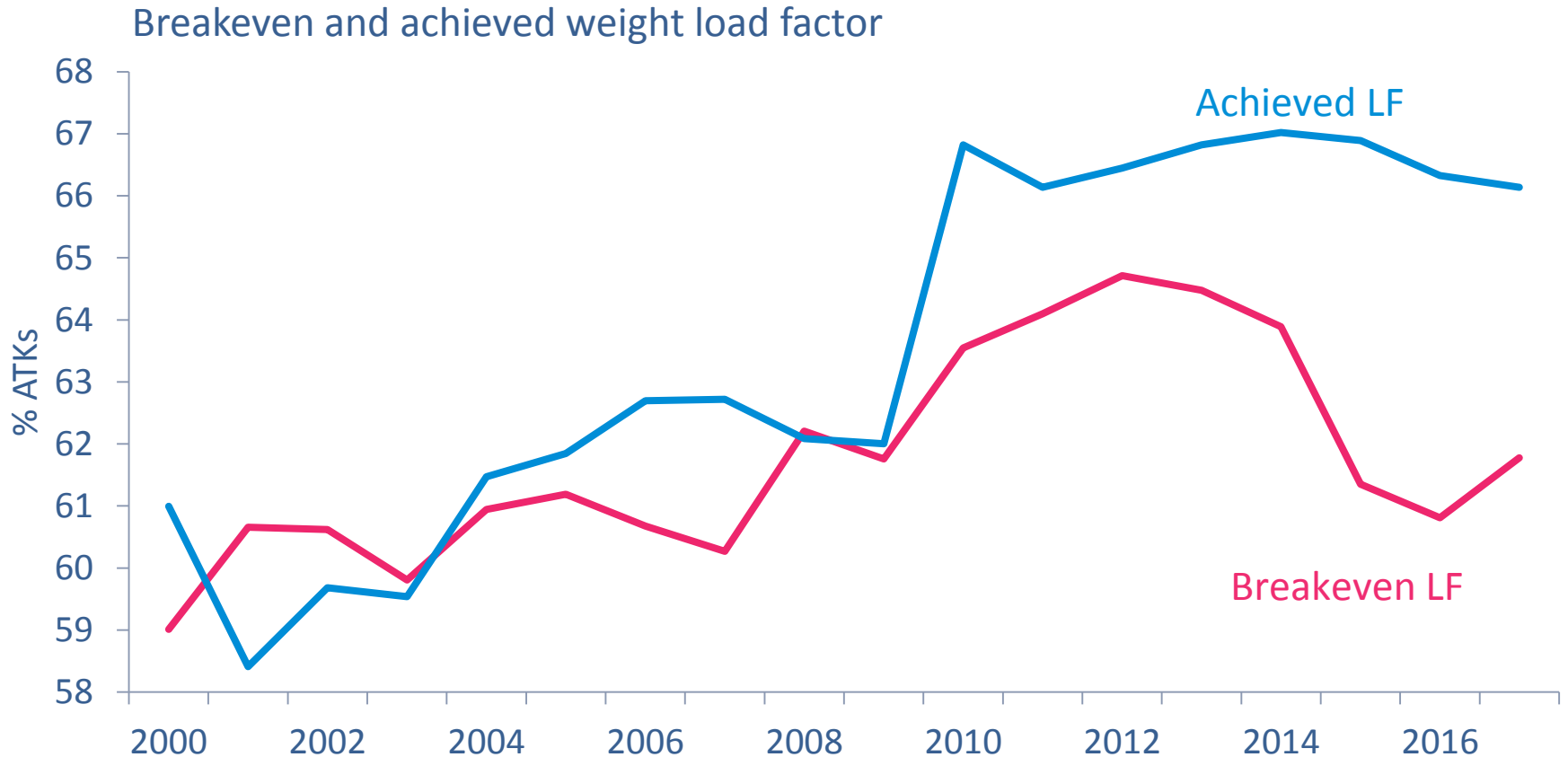
Helping airlines' business model innovation

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



Source: IATA using data from The Airline Analyst

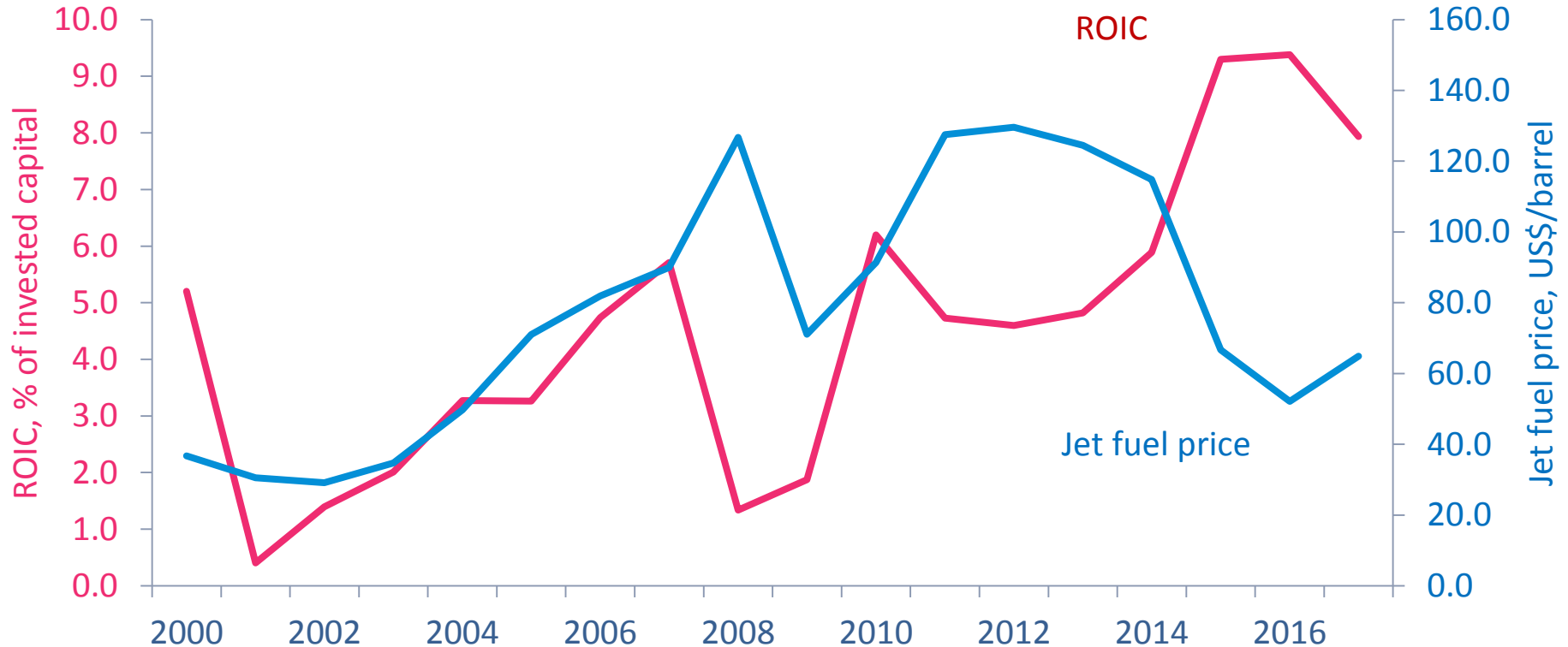
Structural change in approach to asset utilization



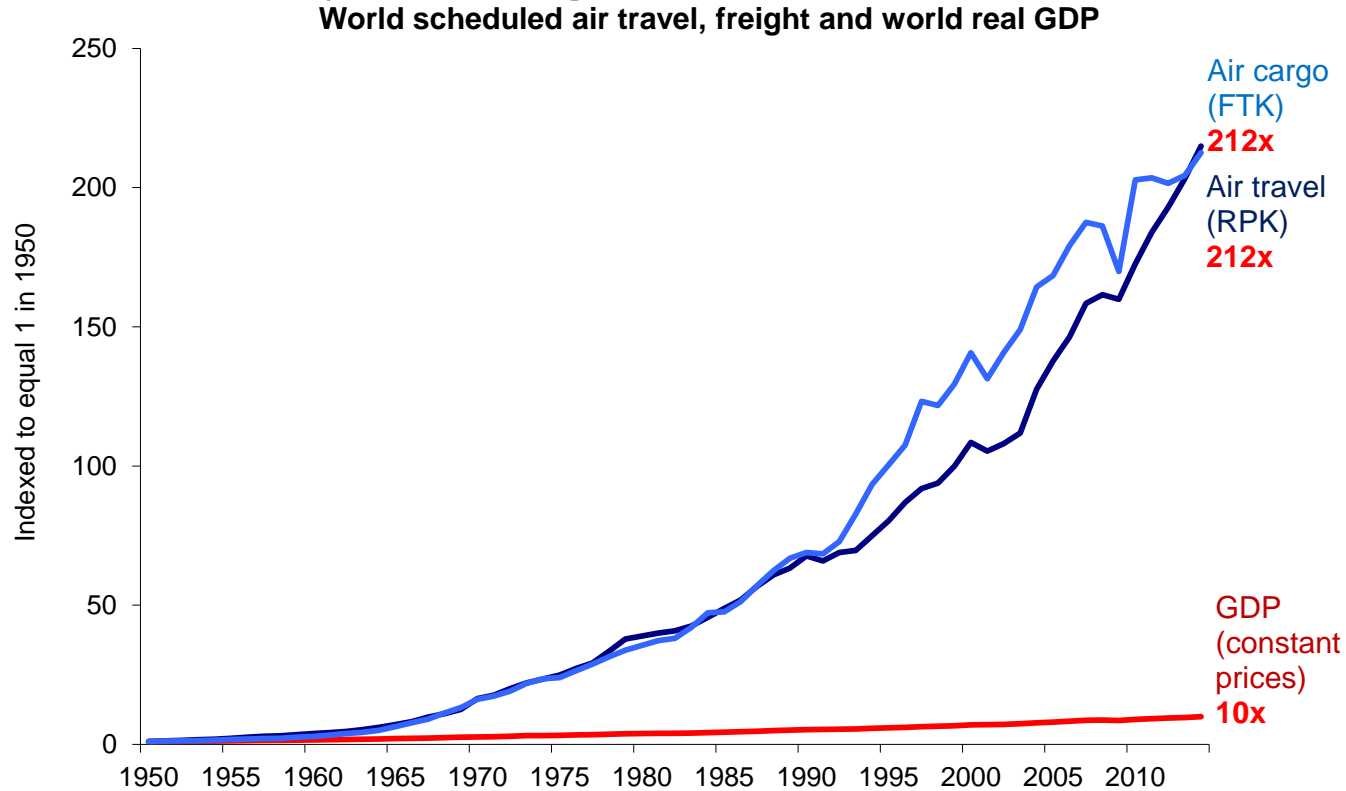
Source: IATA Economic Performance of the Airline Industry – end year 2016 report

High fuel prices not always bad for airlines

Airline industry ROIC and jet fuel prices

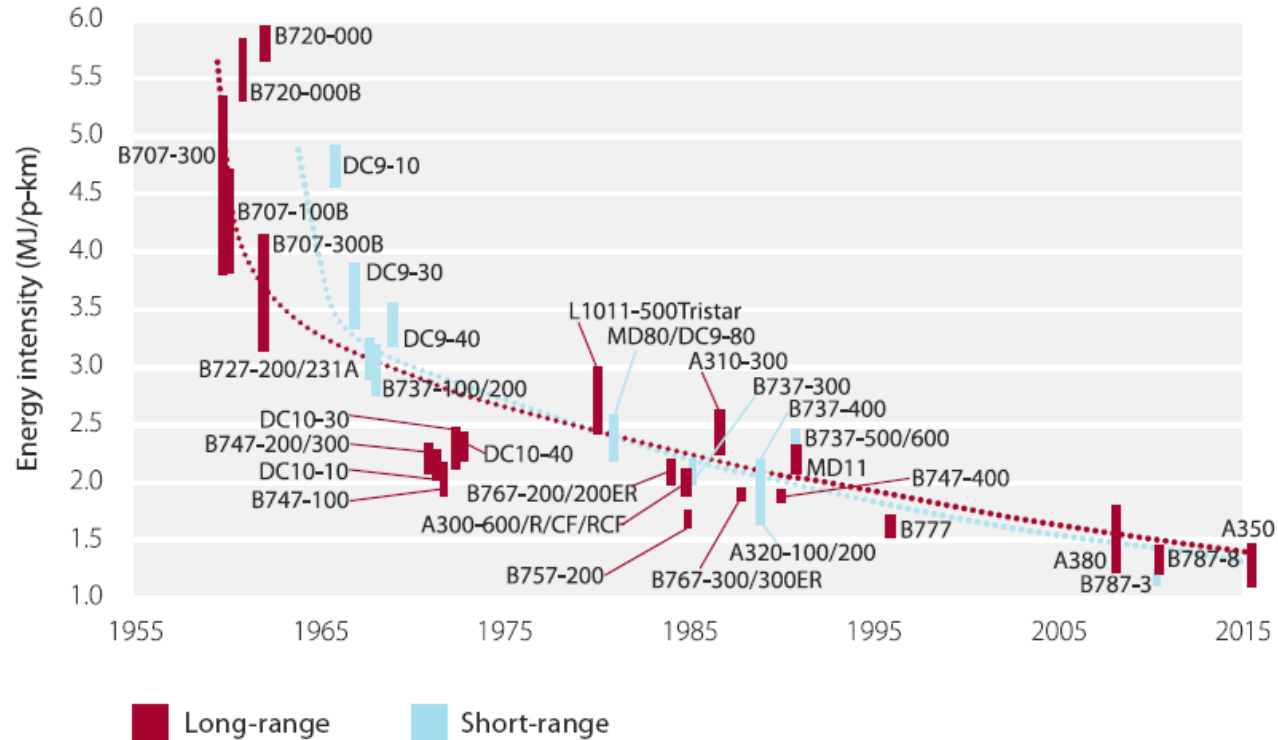


Consumer and business demand extremely strong



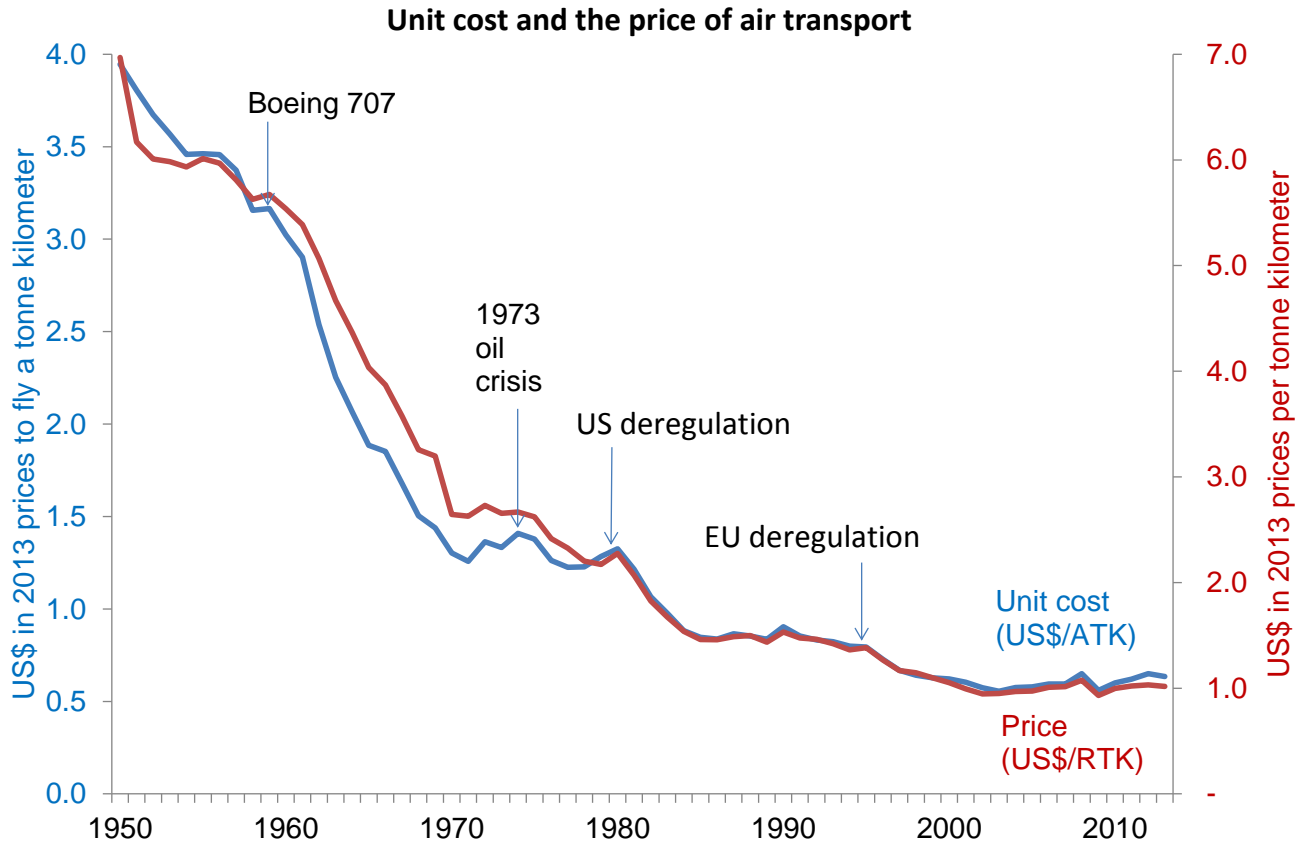
Source: IATA, ICAO, Haver

Aircraft fuel efficiency has improved dramatically



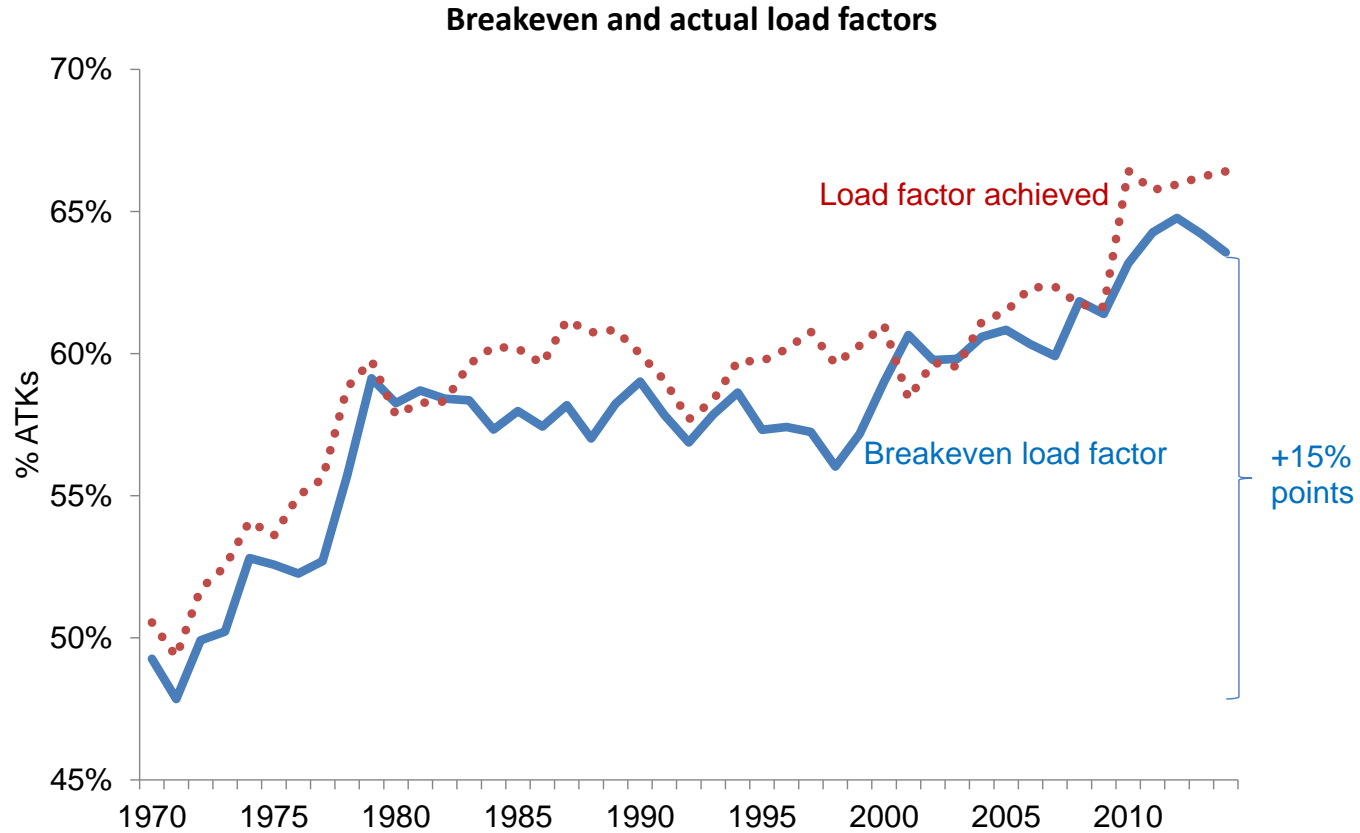
Source: Lee

Costs typically passed through to prices



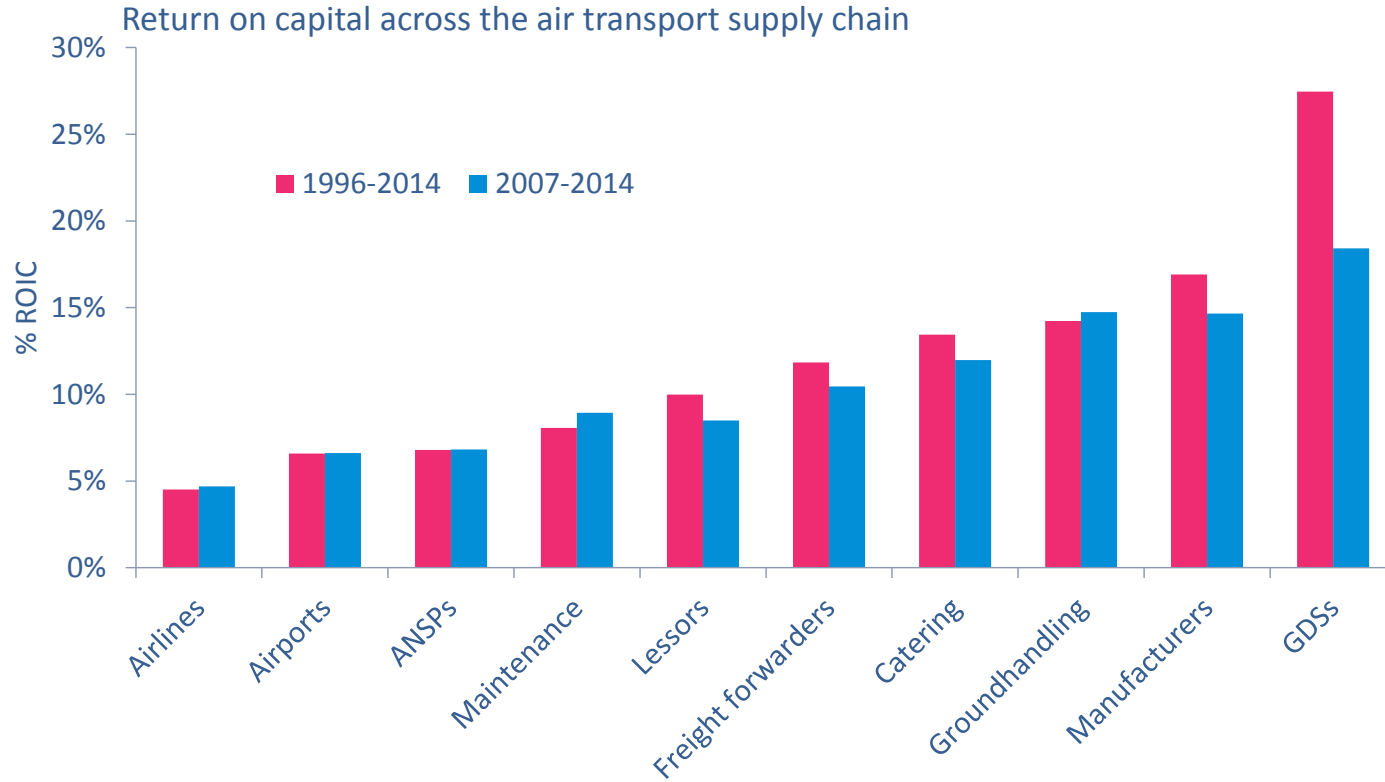
Source: ICAO, IATA

In fact air transport prices have fallen further than costs



Source: IATA, ICAO

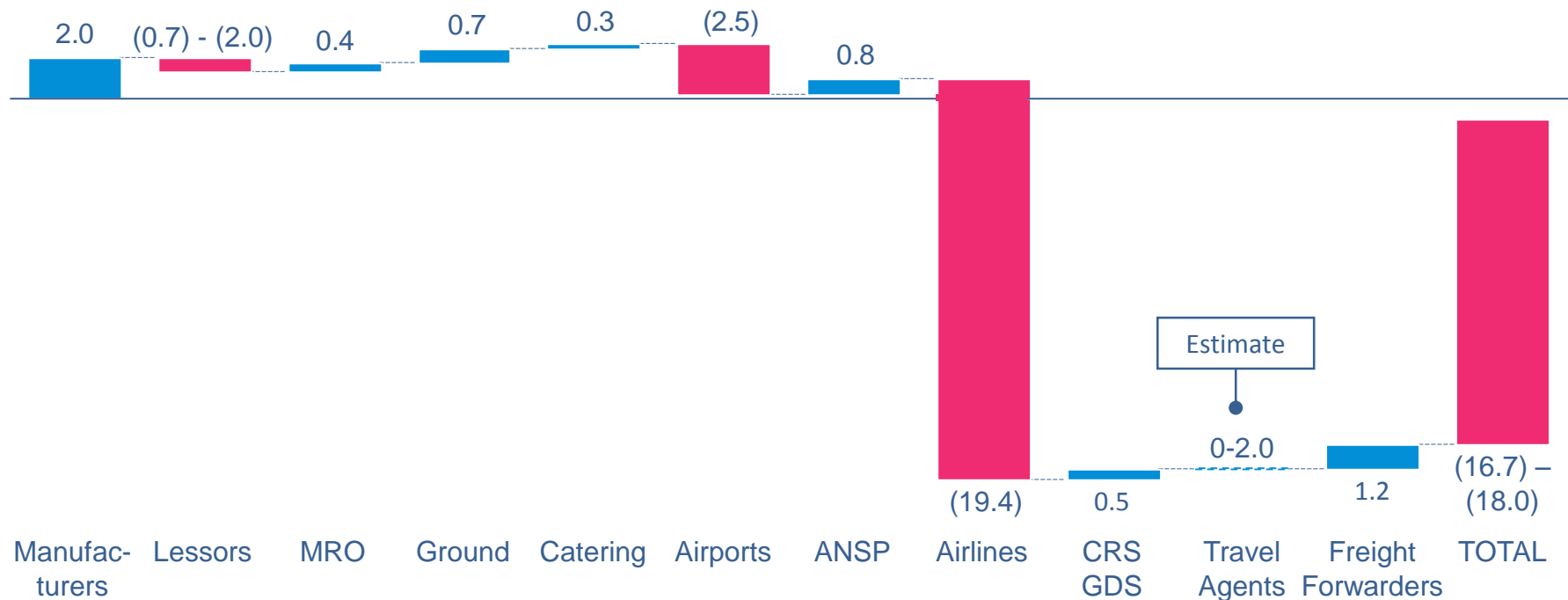
Other sectors do better



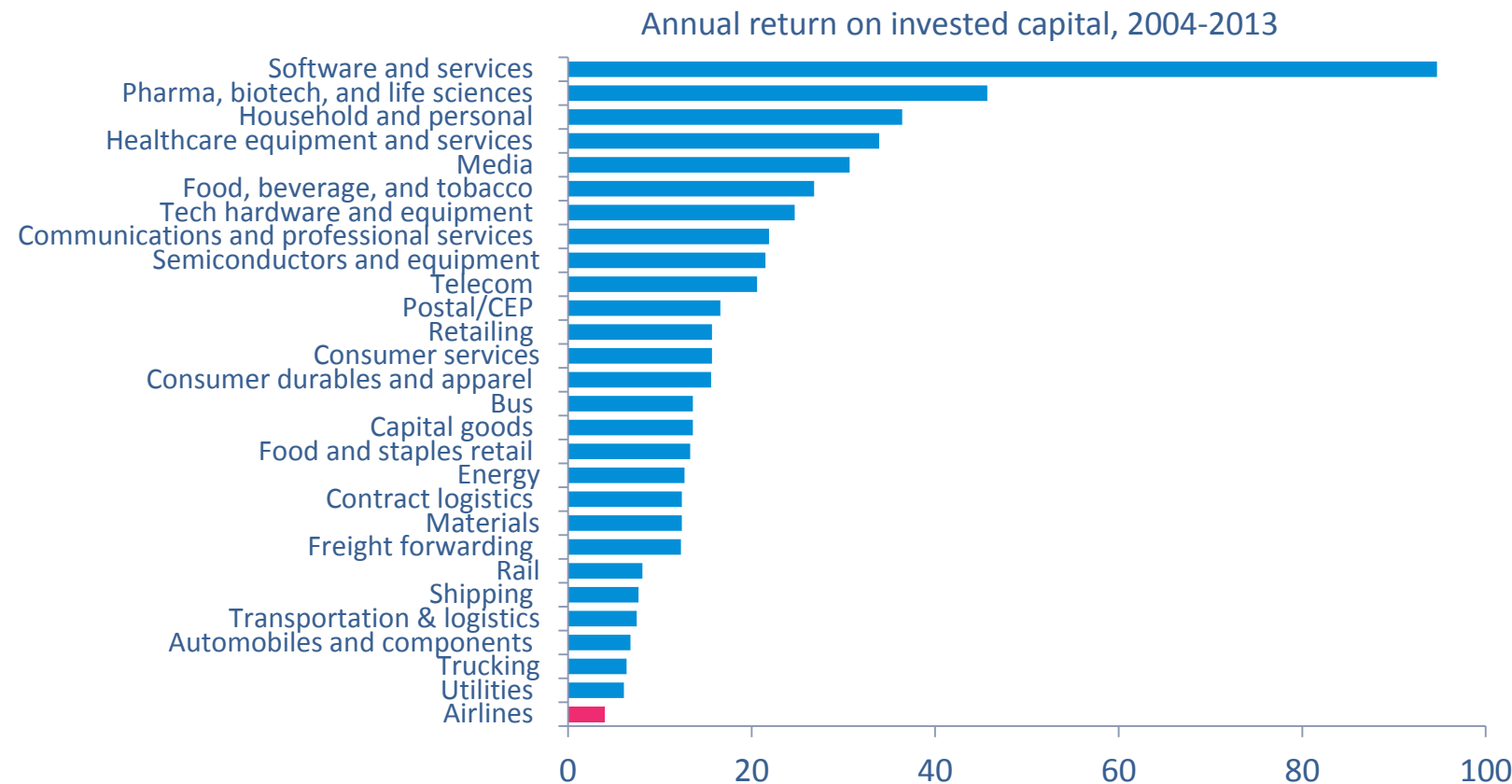
Source: McKinsey for IATA

But this is not the main issue for airline earnings

Average yearly economic profit, USD billion, 2007-2014



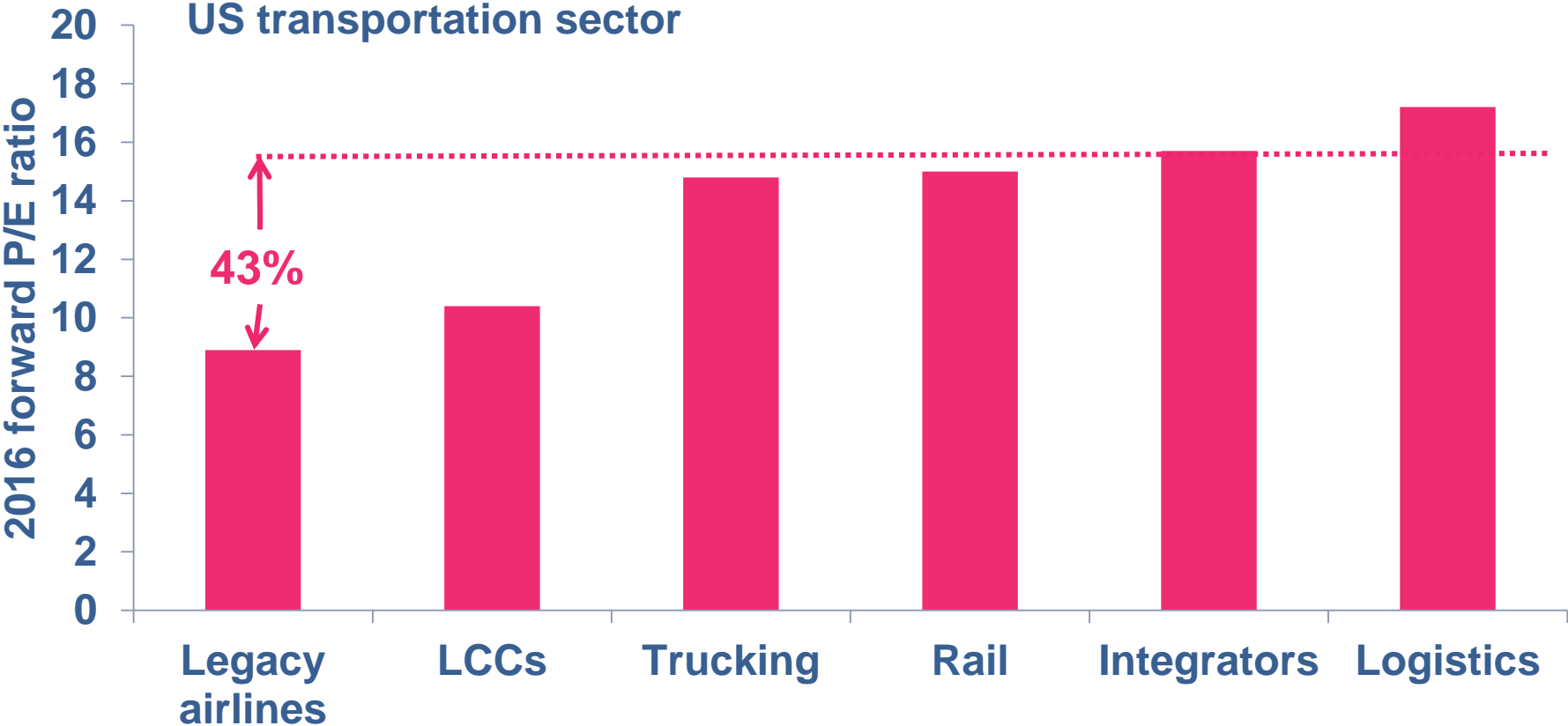
And awful relative performance



Debt finance markets still sceptical of change

AA+/-		Investment grade
A+/-		
BBB+/-	ANZ, Qantas, Lufthansa, Ryanair, Southwest, Alaska, Westjet	
BB+/-	Delta, American, United, Allegiant, Spirit, BA, Turkish, LATAM	
B+/-	Air Canada, Hawaiian, JetBlue, Avianca, GOL, SAS, Virgin Australia	

As are equity markets



LOOKING FOR INSIGHTS INTO AIR TRANSPORT MARKETS AND ISSUES?

Download the new
IATA Economics Research App

 Available for  iOS and  Android

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.

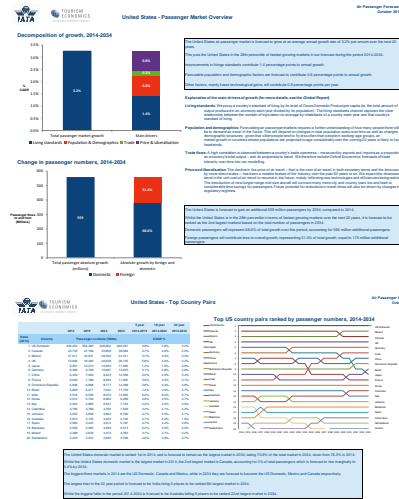
To find out more visit:
www.iata.org/econapp



Global Report



Country Reports



Online database/webtool

