

**TURKISH
AVIATION
ACADEMY**

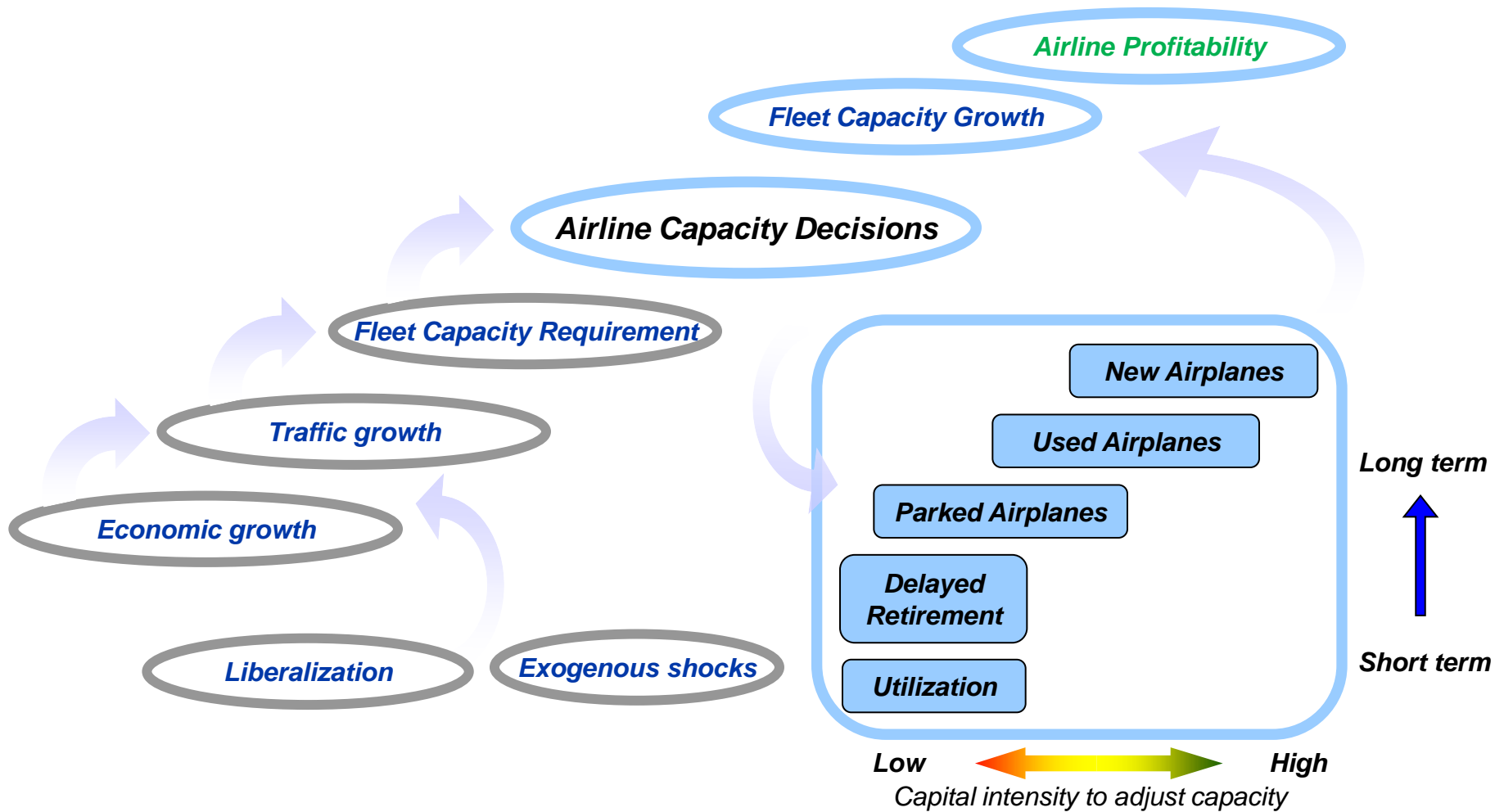


Airline Current Business Environment ***Alex Heiter***

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Air Transportation Management
M.Sc. Program

Network, Fleet and Schedule
Strategic Planning
Module 2: 30 March 2015

The underlying dynamics of our industry



World Business Environment

Key Developments

Indicator	Key Metrics	2014	2015	2016	Updates
Economic environment	<ul style="list-style-type: none"> ▪ GDP ▪ Trade volumes ▪ Oil prices ▪ Exchange rates ▪ Financial markets 				<ul style="list-style-type: none"> ▪ Economic growth accelerating into 2015 ▪ Brent oil price trading ~\$60/bbl, mid-term outlook for price recovery ▪ Heightened geopolitical tensions
Passenger demand	<ul style="list-style-type: none"> ▪ Traffic volumes ▪ Yields 				<ul style="list-style-type: none"> ▪ Traffic +6.1% YoY in December, 5.9% for full year 2014 ▪ At/above long-term average 2015+ ▪ Significant variation between regions, business models
Passenger Capacity	<ul style="list-style-type: none"> ▪ Airline schedules ▪ Parked fleet ▪ Utilization rates ▪ Load factors 				<ul style="list-style-type: none"> ▪ Global capacity growth stable at ~6%, regional variation ▪ Load factors, utilization near/at record highs ▪ Parked fleet showing typical seasonal trends
Air cargo demand	<ul style="list-style-type: none"> ▪ Traffic volumes ▪ Yields 				<ul style="list-style-type: none"> ▪ Traffic +4.9% YoY in December, IATA: 4.5% growth for 2014 ▪ Demand growth returning to long-term average 2015+ ▪ Significant variation between regions, business models
Air cargo capacity	<ul style="list-style-type: none"> ▪ Parked fleet ▪ Utilization rates ▪ Load factors 				<ul style="list-style-type: none"> ▪ Load factors, large freighter utilization recovering ▪ Parked current-generation airplanes, but initial returns to service
Airline financials	<ul style="list-style-type: none"> ▪ Industry profitability ▪ Airline performance ▪ Airplane financing 				<ul style="list-style-type: none"> ▪ Airlines managing uncertainty, volatile fuel prices ▪ Airline industry net margins: 2.7% in 2014, 3.2+% in 2015



Satisfactory

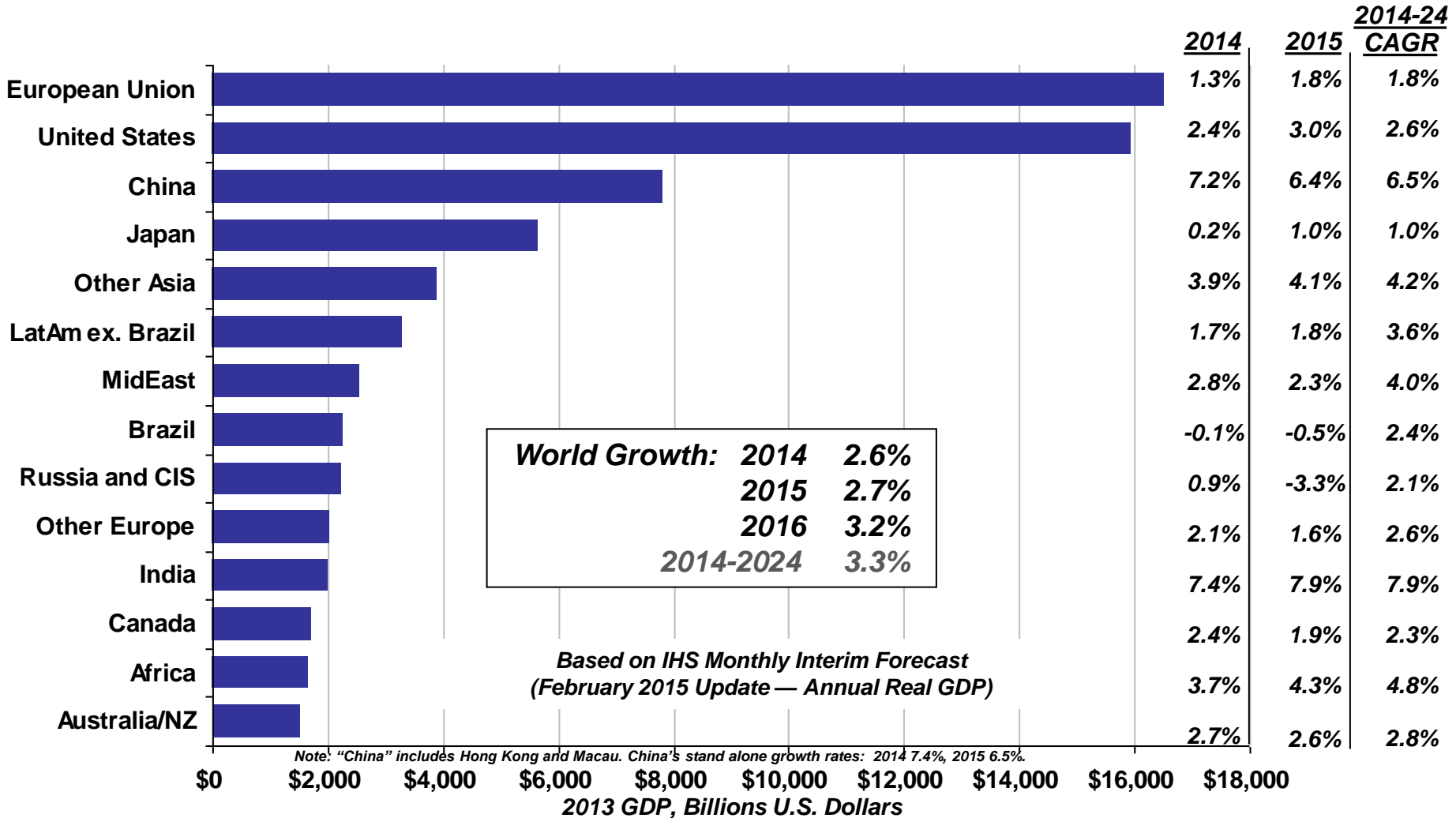


Cautionary



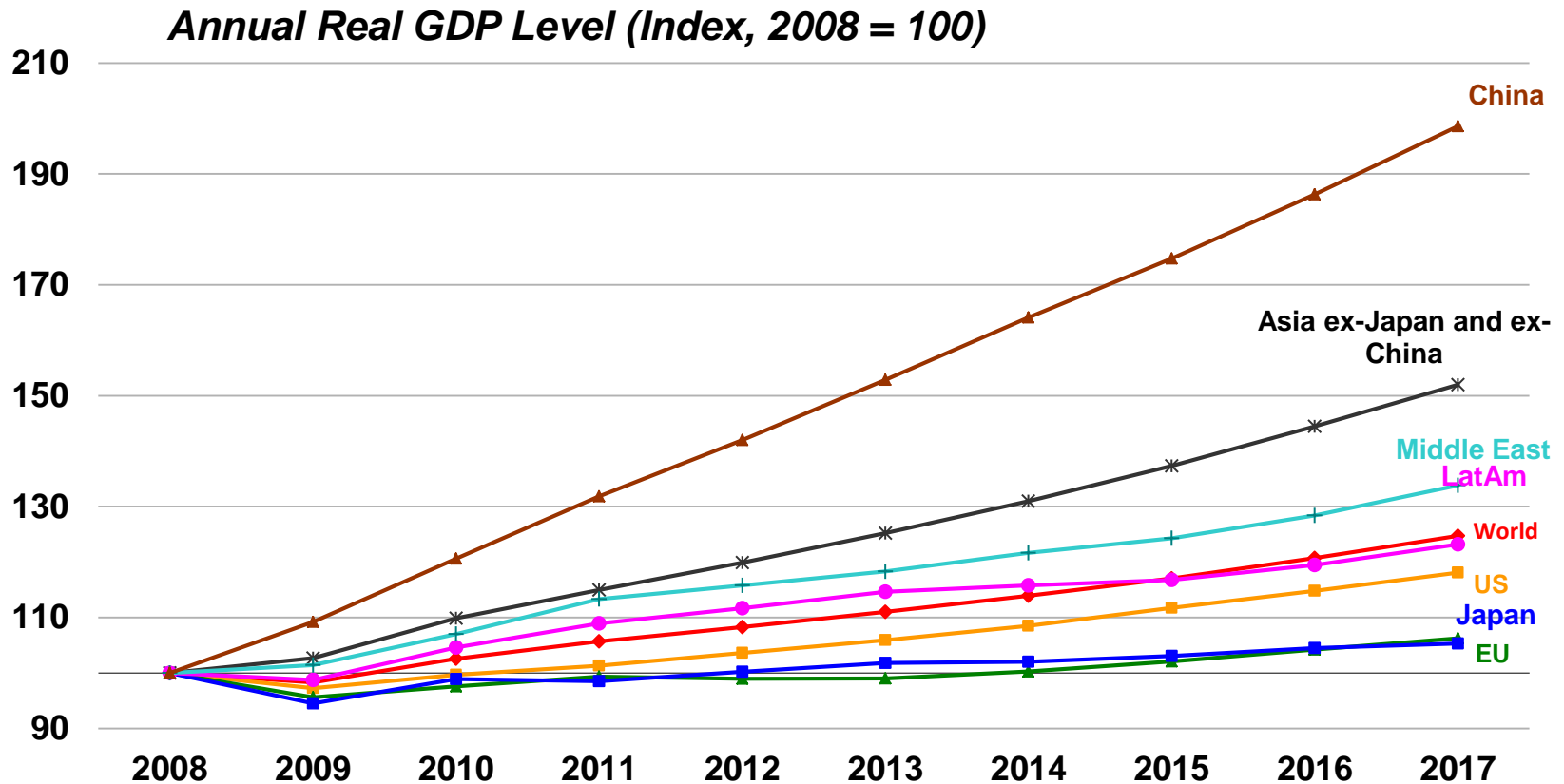
Major Concern

World Economic Outlook



Growth accelerating into 2015

World GDP Level Index

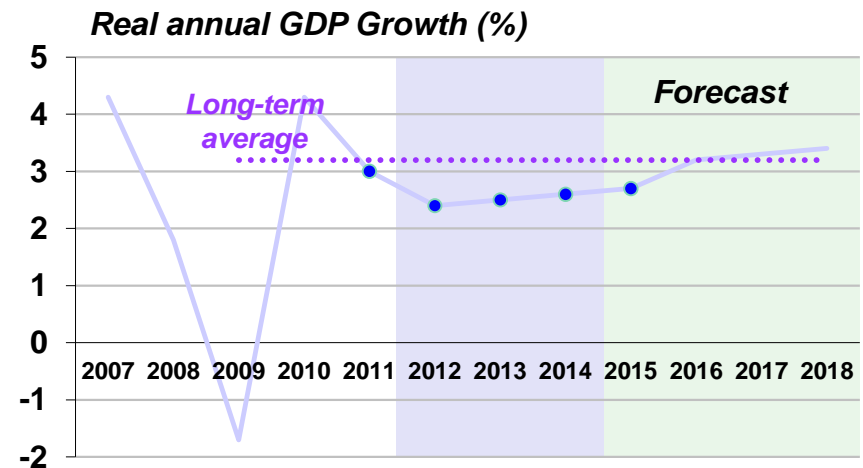


Source: IHS (February 2015 Interim Forecast, world = real GDP growth)

Emerging markets contribute to global economic recovery

World Economic Outlook

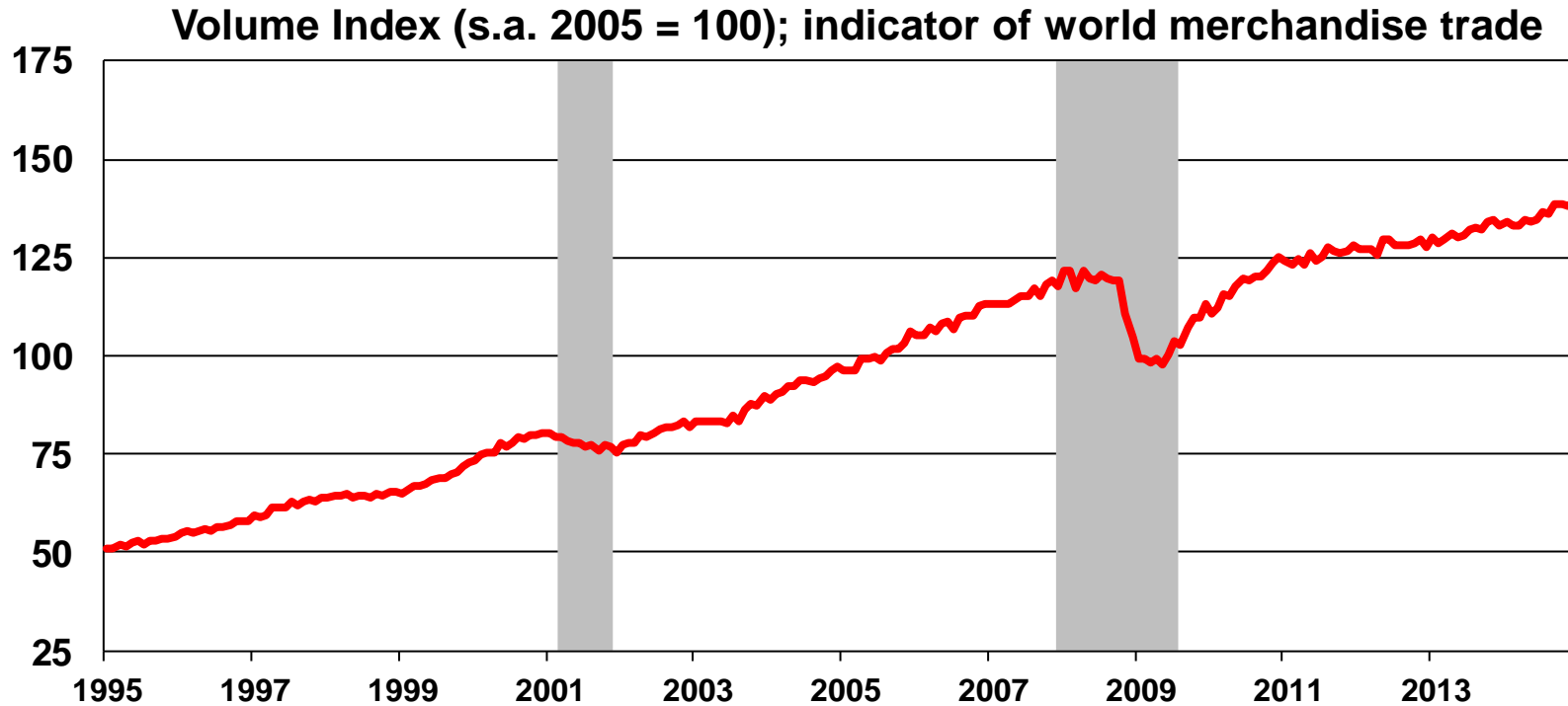
- **Economic growth below trend since 2011**
- **Accelerating growth and return to trend in 2016 behind strong US economy**
- **Trade growth improving, cargo showing signs of improvement**



Source: IHS (February 2015 Interim Forecast)

Global economic growth strengthening in 2015-6

World Trade



Source: Netherlands Bureau for Economic Policy Analysis (<http://www.cpb.nl/eng/research/sector2/data/trademonitor.html>)

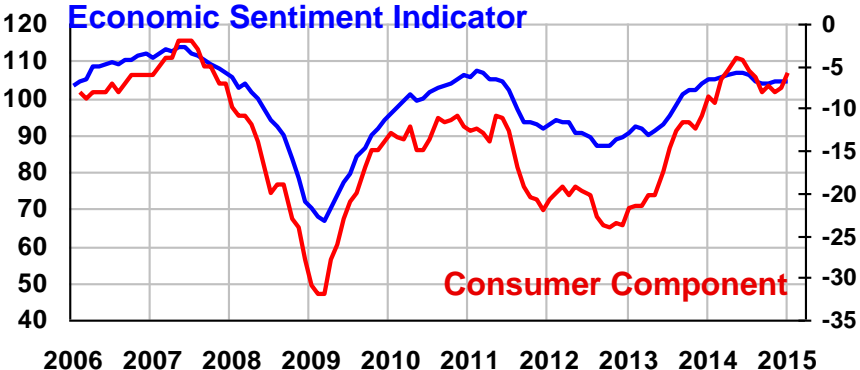
Trade accelerates slightly in 2015

Consumer Confidence

United States



European Union



Japan



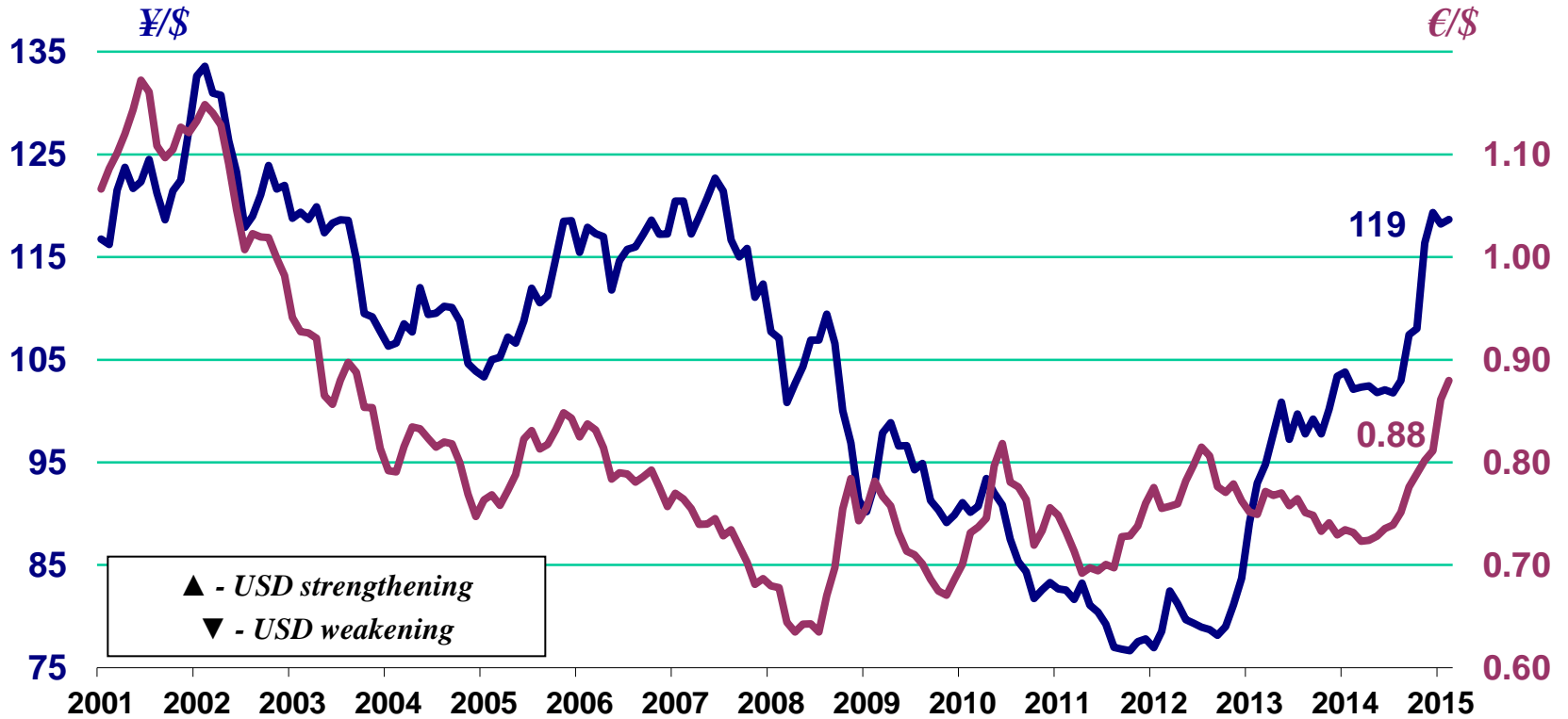
China



Consumer confidence around decade-high in US, improving in EU

Exchange Rates

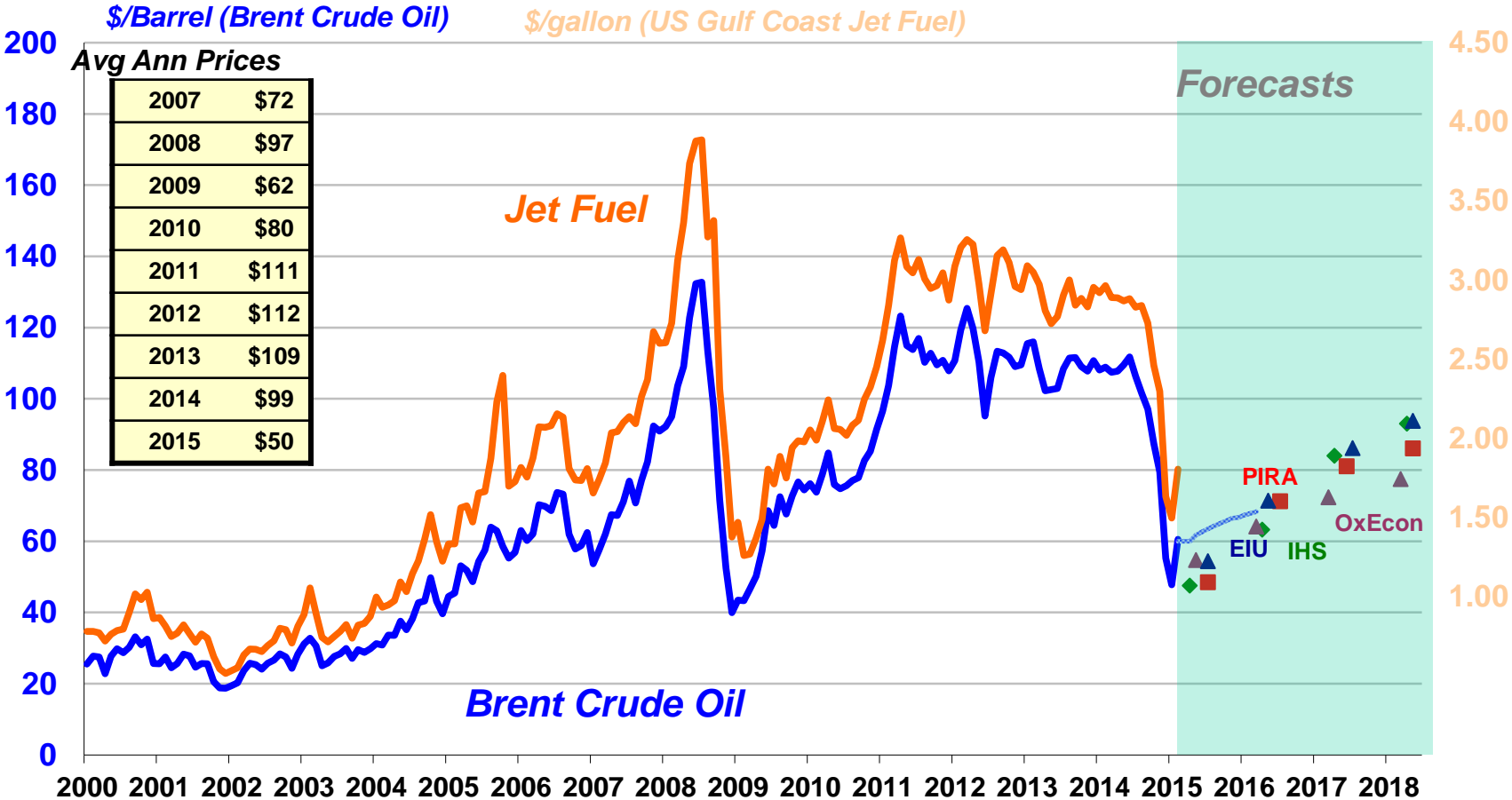
Monthly Average Exchange Rates



Source: Pacific Exchange Rate Service; Last data point: February 2015

U.S. dollar strengthening significantly

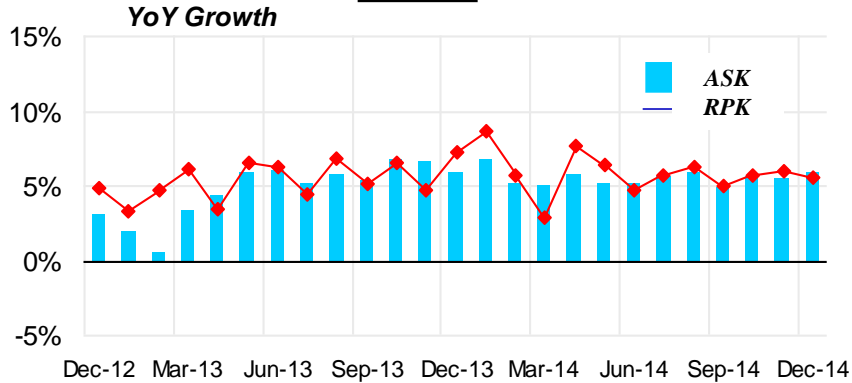
Oil and jet fuel prices



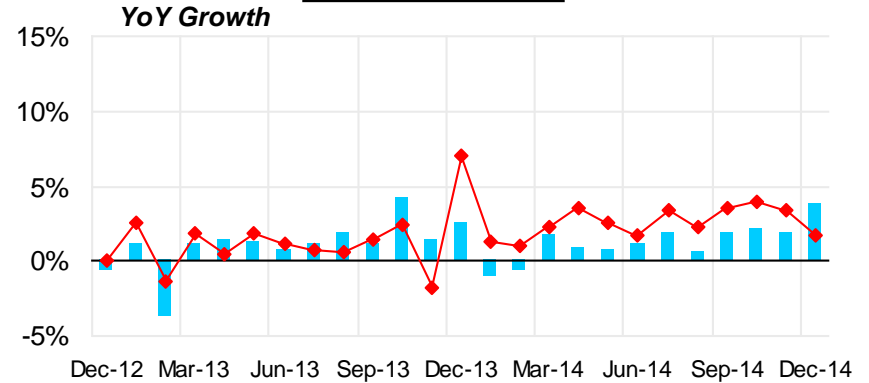
Oil prices down 50+% since June, mid-term price outlooks \$80+/bbl

World Passenger Traffic and Capacity

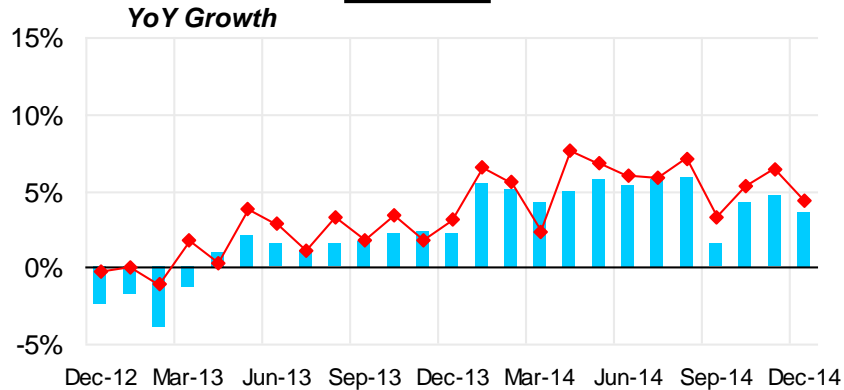
World



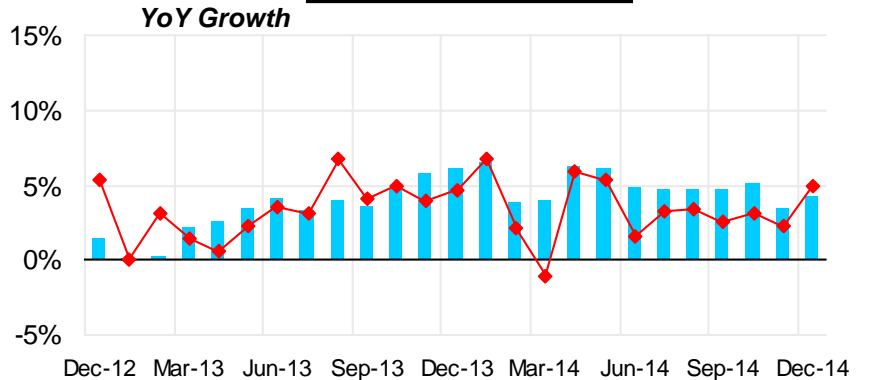
US Domestic



Europe



Asia Pacific Int'l

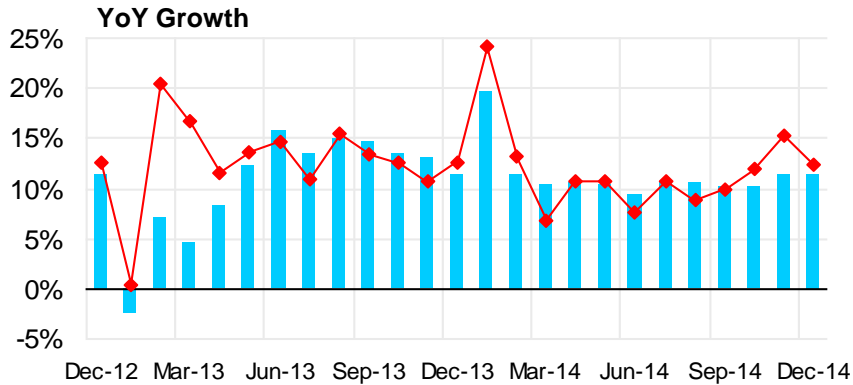


Source: ATA, AEA, AAPA, IATA, ALTA, CAAC, airline reports, Boeing market analysis

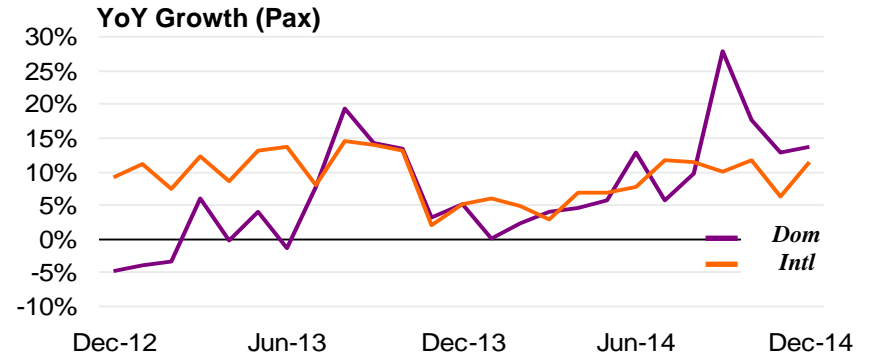
Traffic growth continues to be above long-term 5% growth rate

Emerging Market Traffic and Capacity

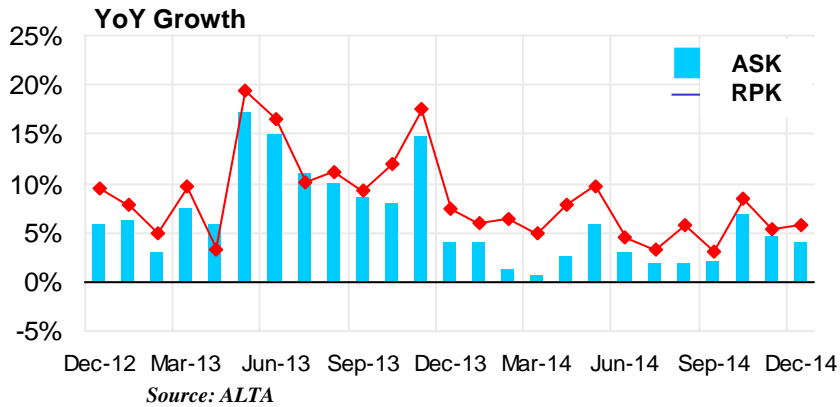
China



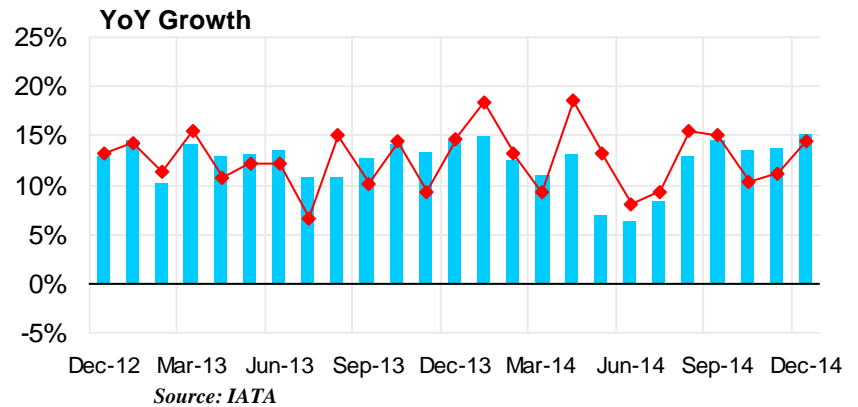
India



Latin America



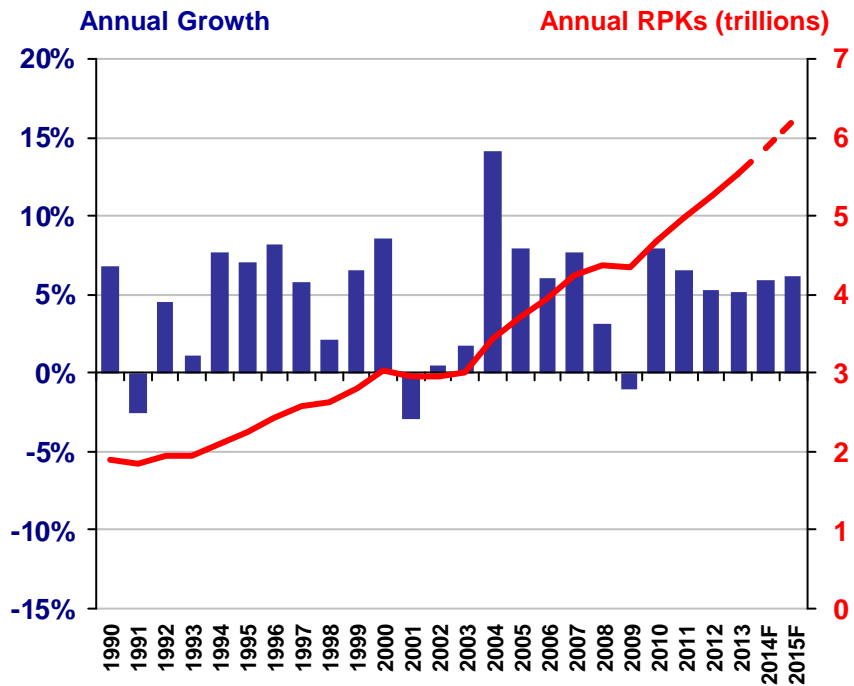
Middle East Int'l



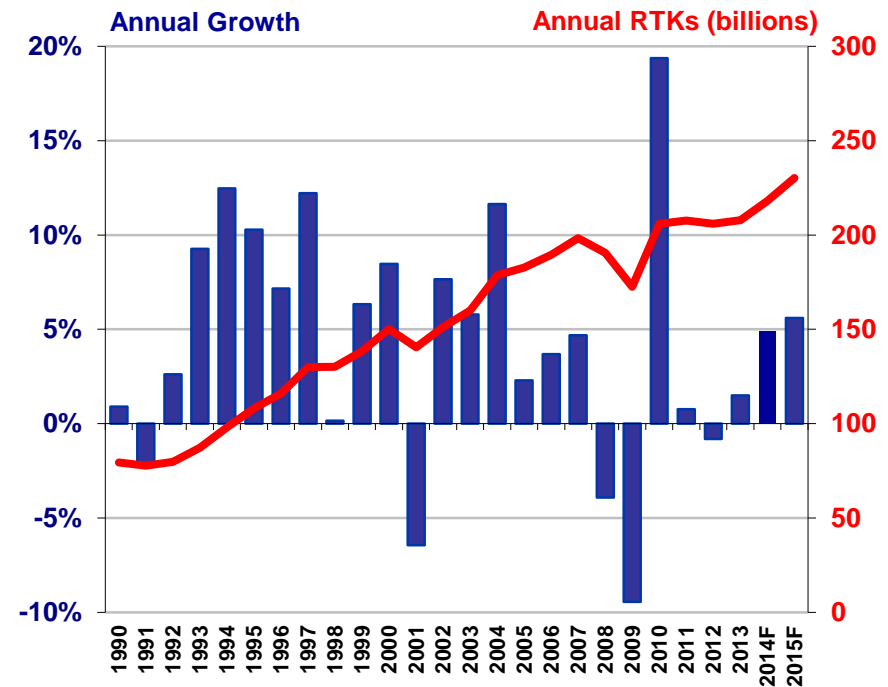
Significant variation between regions, emerging markets leading

Near-term Traffic Outlook Passenger and Cargo

Passenger traffic



Air cargo traffic

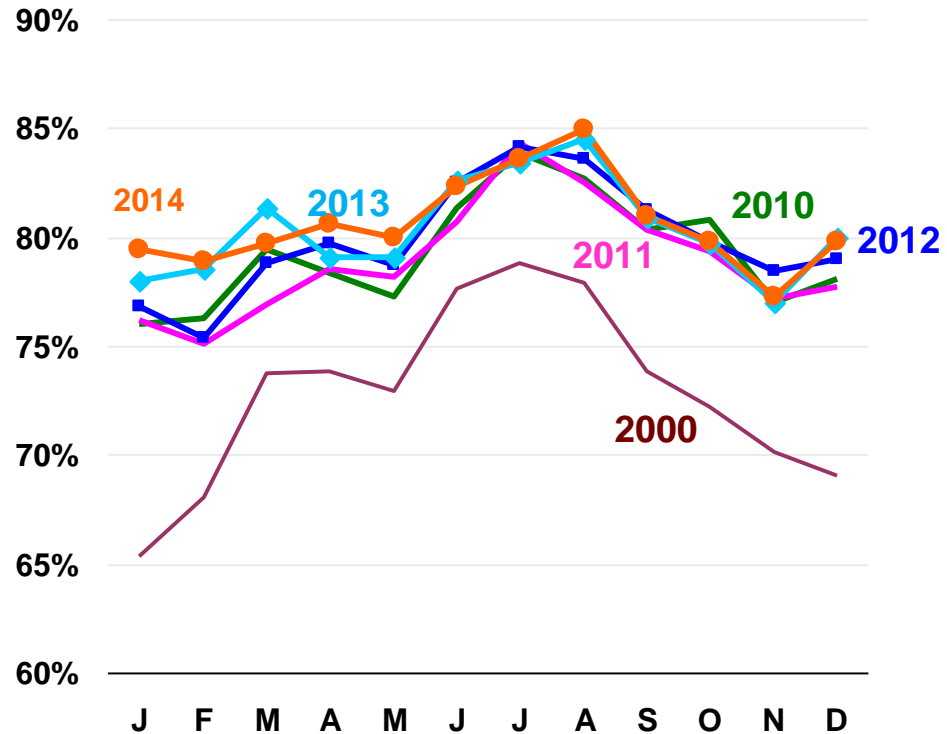


Passenger traffic resilient, cargo market recovering

Passenger Capacity

- Airlines adjusting capacity in response to demand, route profitability
- Load factors are at or near record highs throughout the year; March should just be an anomaly due to Easter timing
- Parked fleet - typical seasonal trends
- Utilization near peaks, single aisle more seasonal

World Load Factor

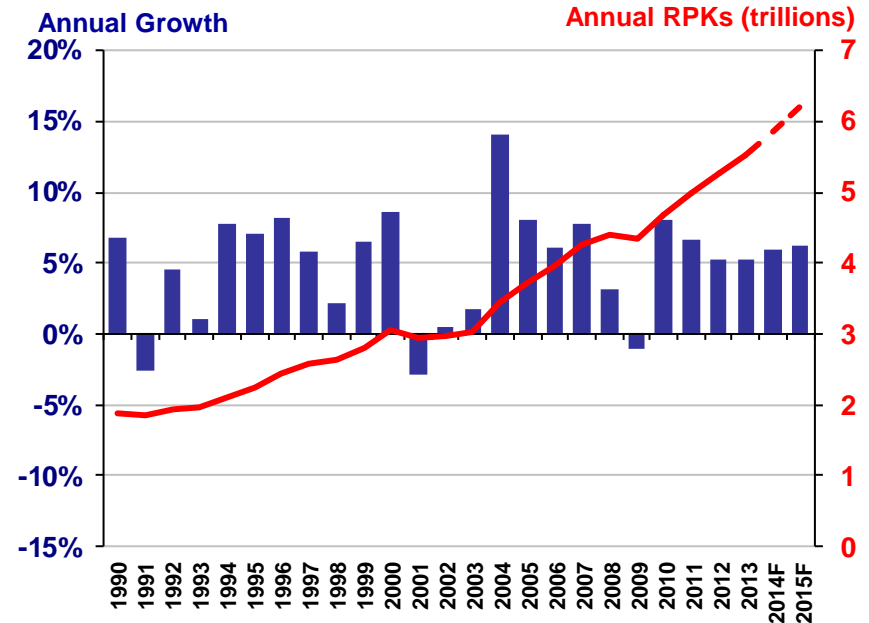


Global passenger capacity growing broadly in balance with traffic

Passenger demand

- Emerging markets – GDP, middle class growth
- New airline business models
- Demographics support leisure travel
- Air travel relative affordability
- Business travel – revenue focus, travel intensive sectors outperforming

Passenger Traffic

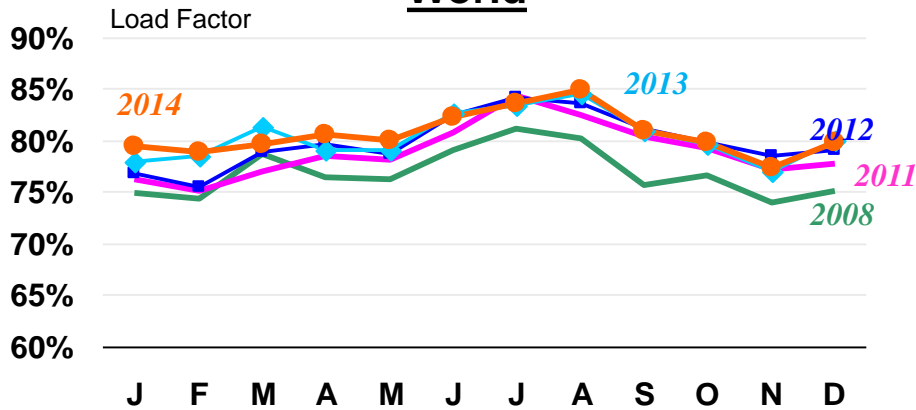


Source: ICAO, BCA

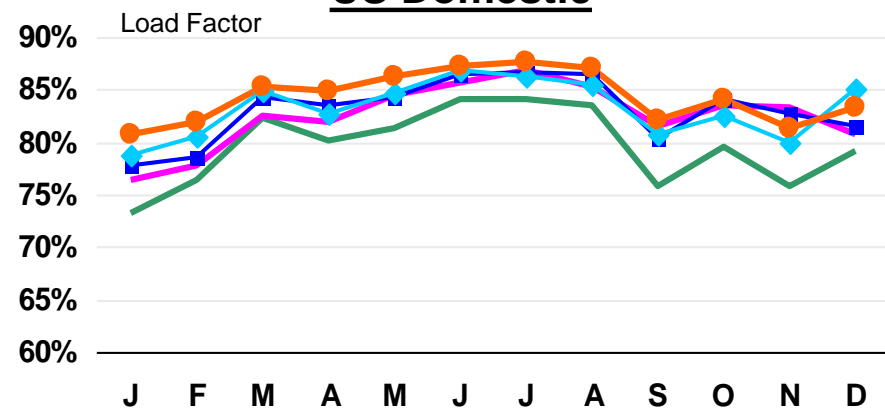
Passenger traffic resilient due to multiple factors

Passenger Load Factors

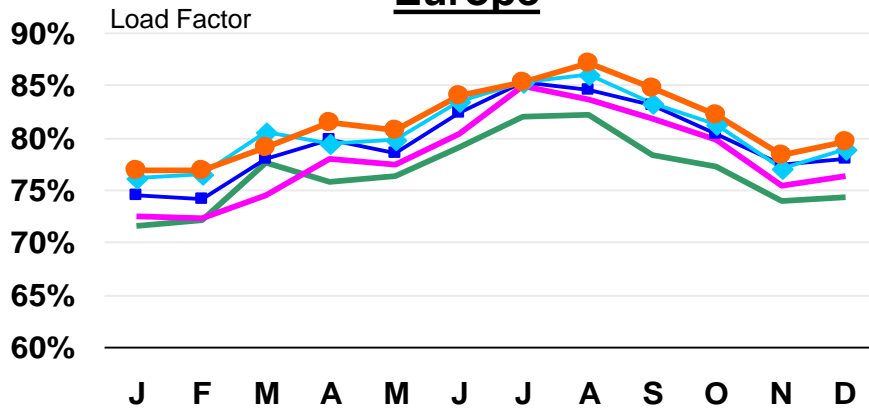
World



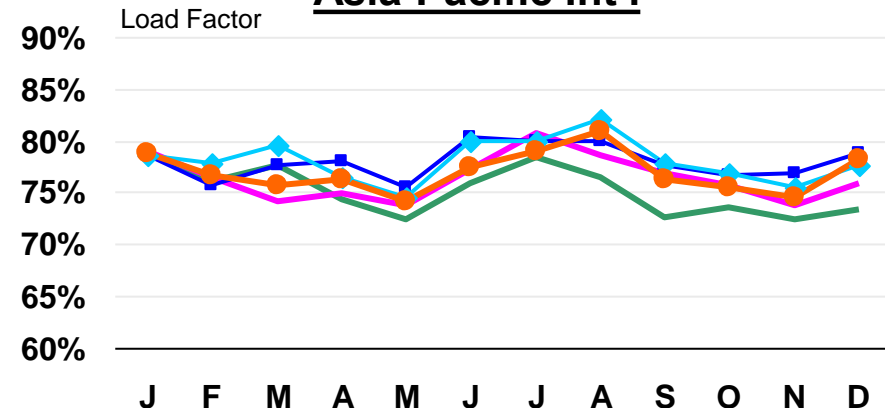
US Domestic



Europe



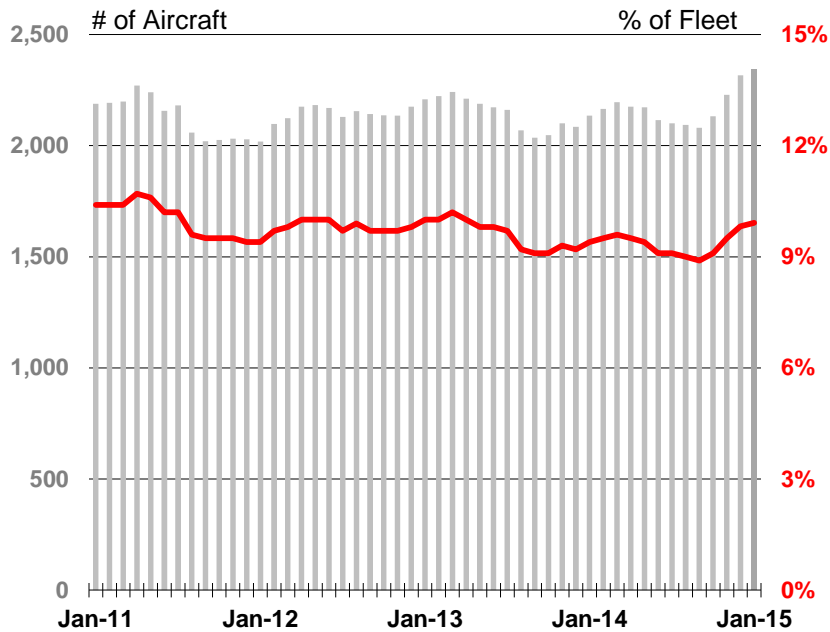
Asia Pacific Int'l



Record high load factors from traffic growth, capacity discipline

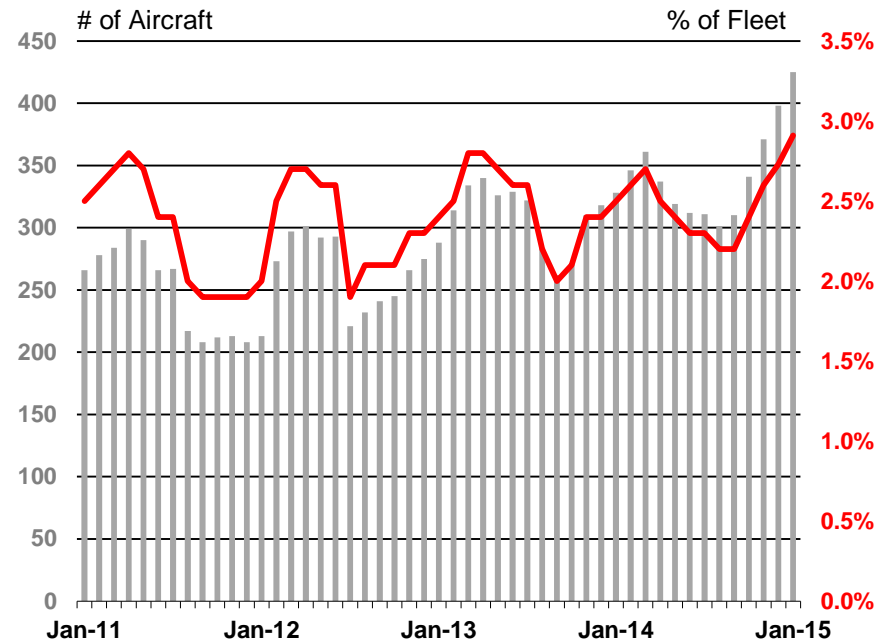
Commercial parked fleet trends January 2015

Total Parked Fleet



AC Types Included: All Western-built Jets > 90 seats

In-Production Parked Fleet



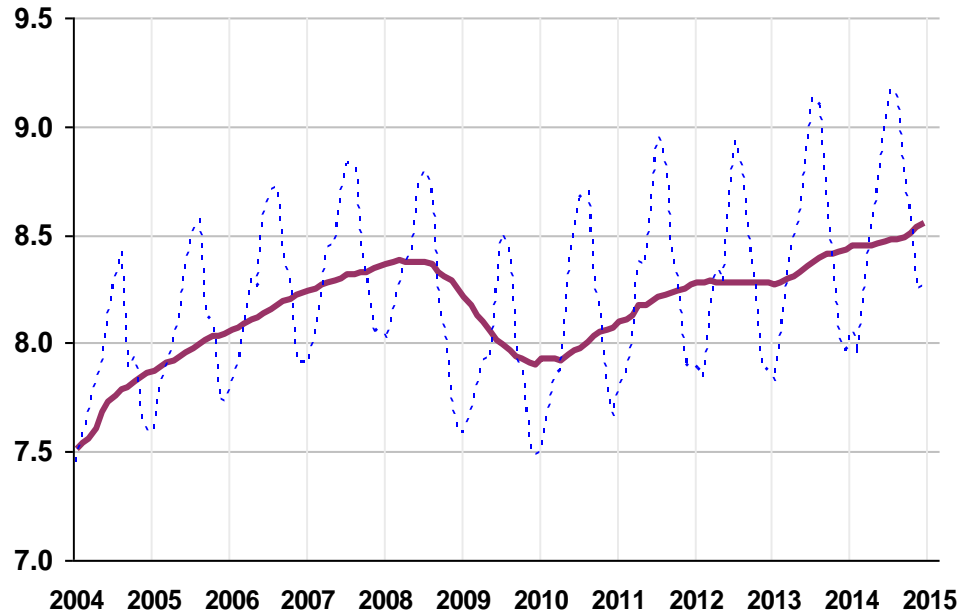
AC Types Included: 737NG, 747-8, 767, 777, 787, A320, A330, A380

9.9% of total fleet parked and 2.9% of in-production fleet parked

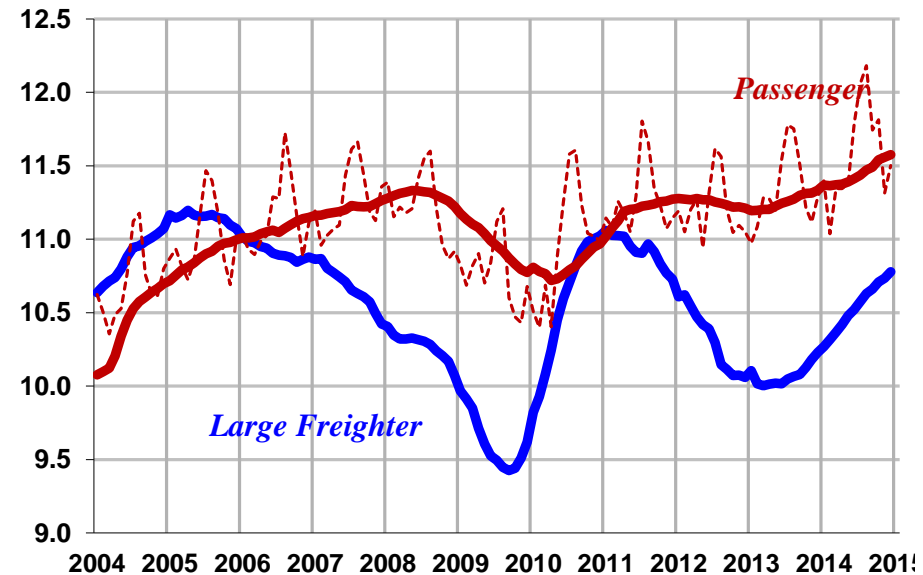
Airplane Utilization Trends

Flight Hours Per Day (12-month moving average)

Single Aisle



Twin Aisle



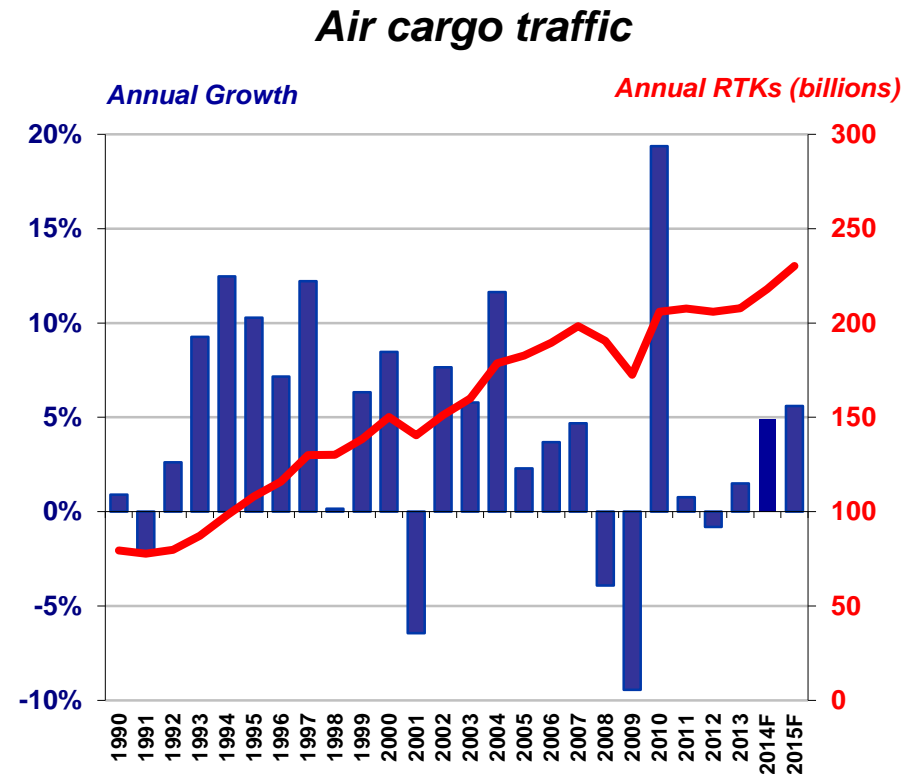
Large Freighters include 777Fs and 747 Fs (all models)

Source: BCA RM&T Fleet Reliability Statistics (subject to reporting revisions)

Passenger at record levels, large freighters continue to rebound

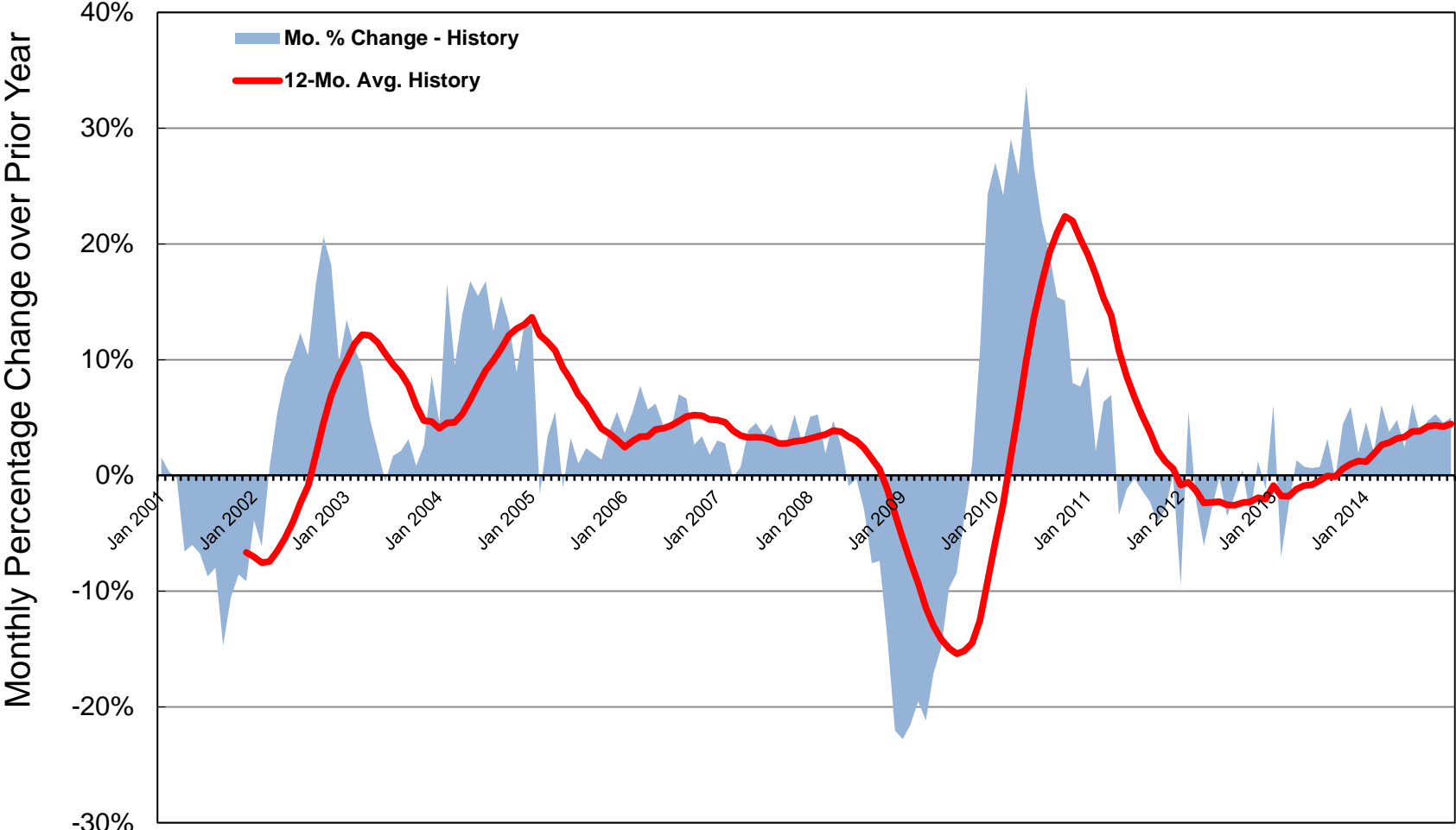
Air cargo demand

- No volume growth 1Q11 through 1Q13
 - Shocks, slow economic growth
 - Weak consumer markets – Europe, US
 - High fuel prices
 - Containership competition
- Growth resumed in 2Q2013
- 4.5% YTD growth in 2014 through December according to IATA & A4A



Near-term cargo market challenges, long-term growth market

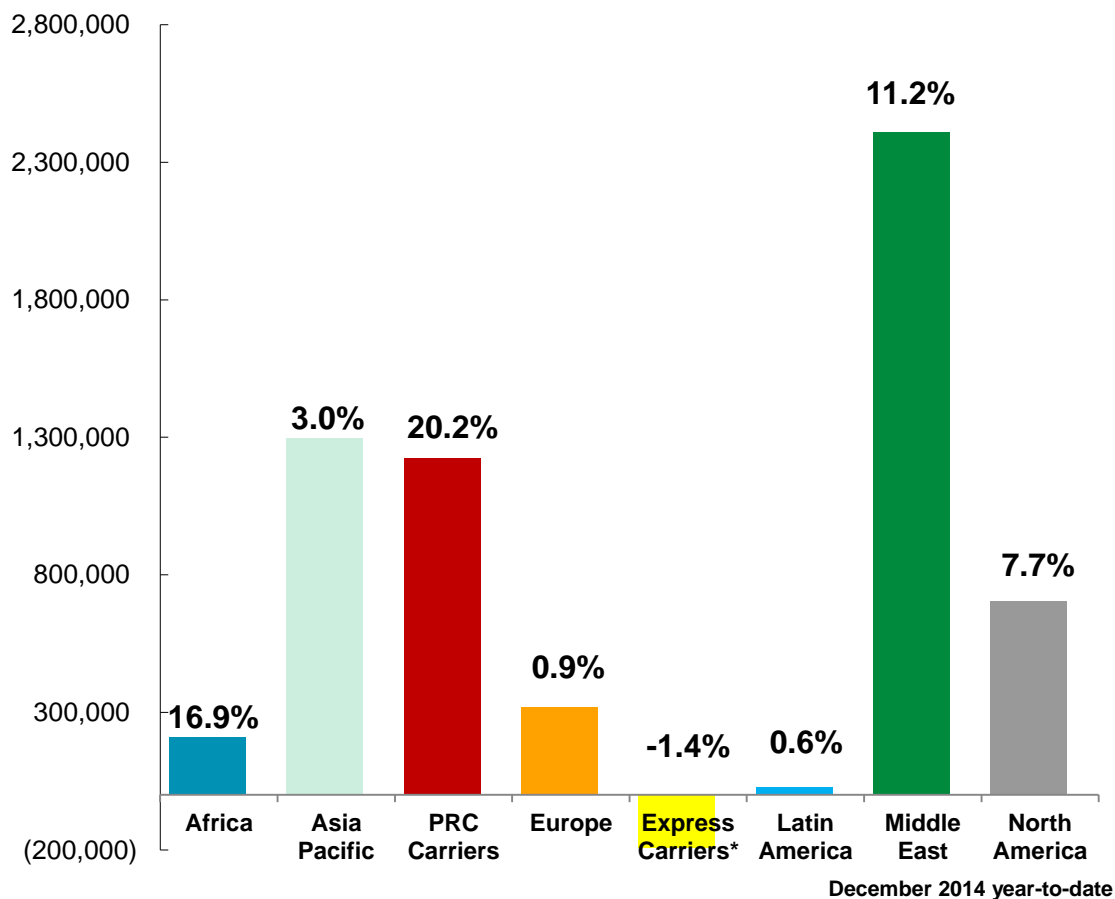
World air cargo traffic recovering since 2Q2013



Sources: IATA Carrier Tracker (industry international scheduled freight) and A4A US domestic cargo traffic.

The strength of the air cargo recovery varies by region of airline domicile and/or business model

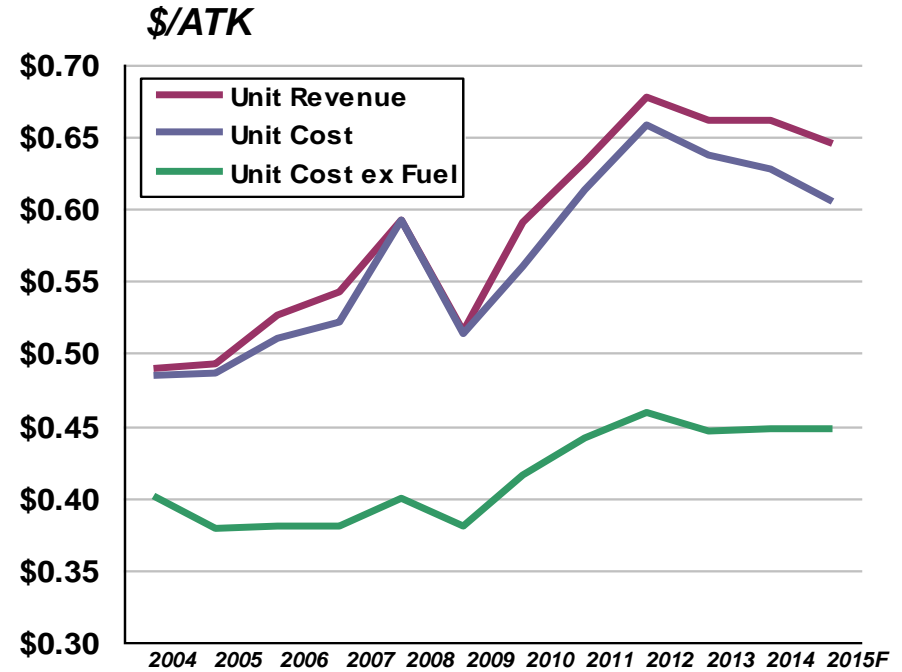
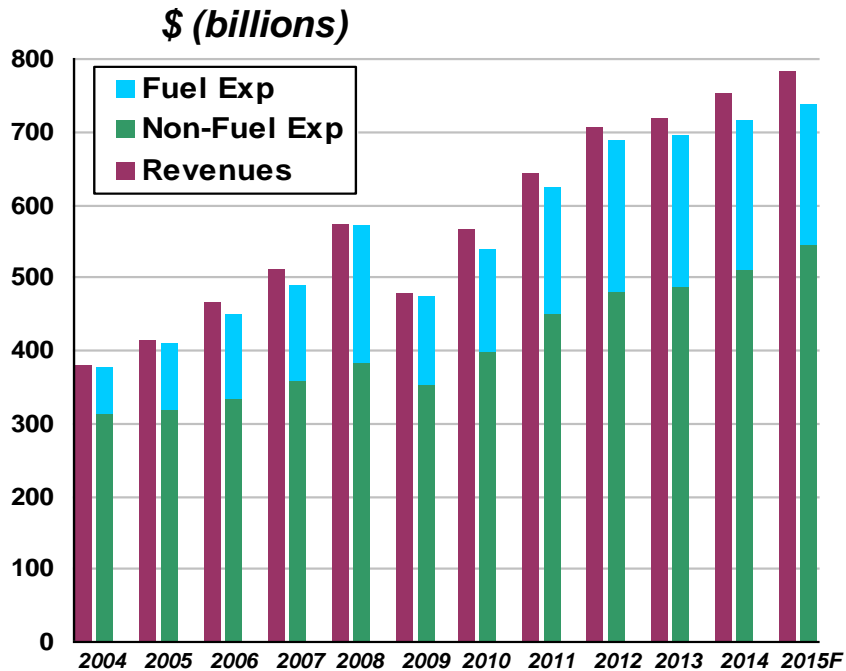
- World air cargo grew 0.9% in 2013
- Air cargo traffic up 4.5% YTD through December 2014 per IATA and A4A statistics.
- Growth was likely 5% or better in 2014; complete statistics will be available in the coming months.
- Express carriers (FDX, UPS only) volumes down slightly, possibly due to competition with DHL
- Middle East, PRC, and European carriers adding capacity to capture emerging opportunities



Sources: IATA Carrier Tracker (Industry international scheduled freight), A4A US domestic cargo traffic, and Boeing analysis

* Fedex and UPS freighter flown statistics only per A4A

Airline revenues and costs

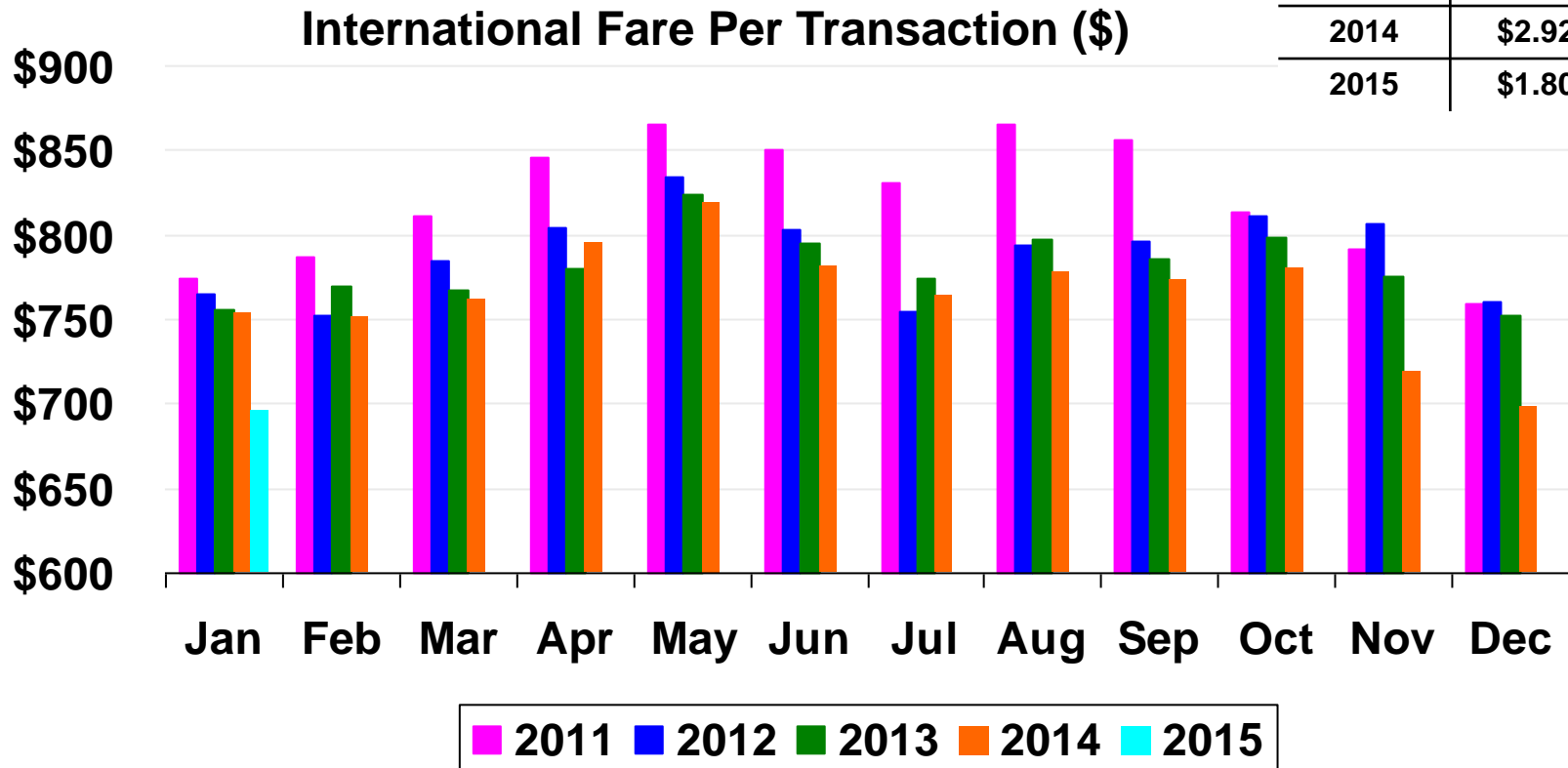


Source: IATA, December 2014 Financial Forecast & BCA Market Analysis

Improving financial outlook – rising economic outlook, lower fuel prices

International Fare Development

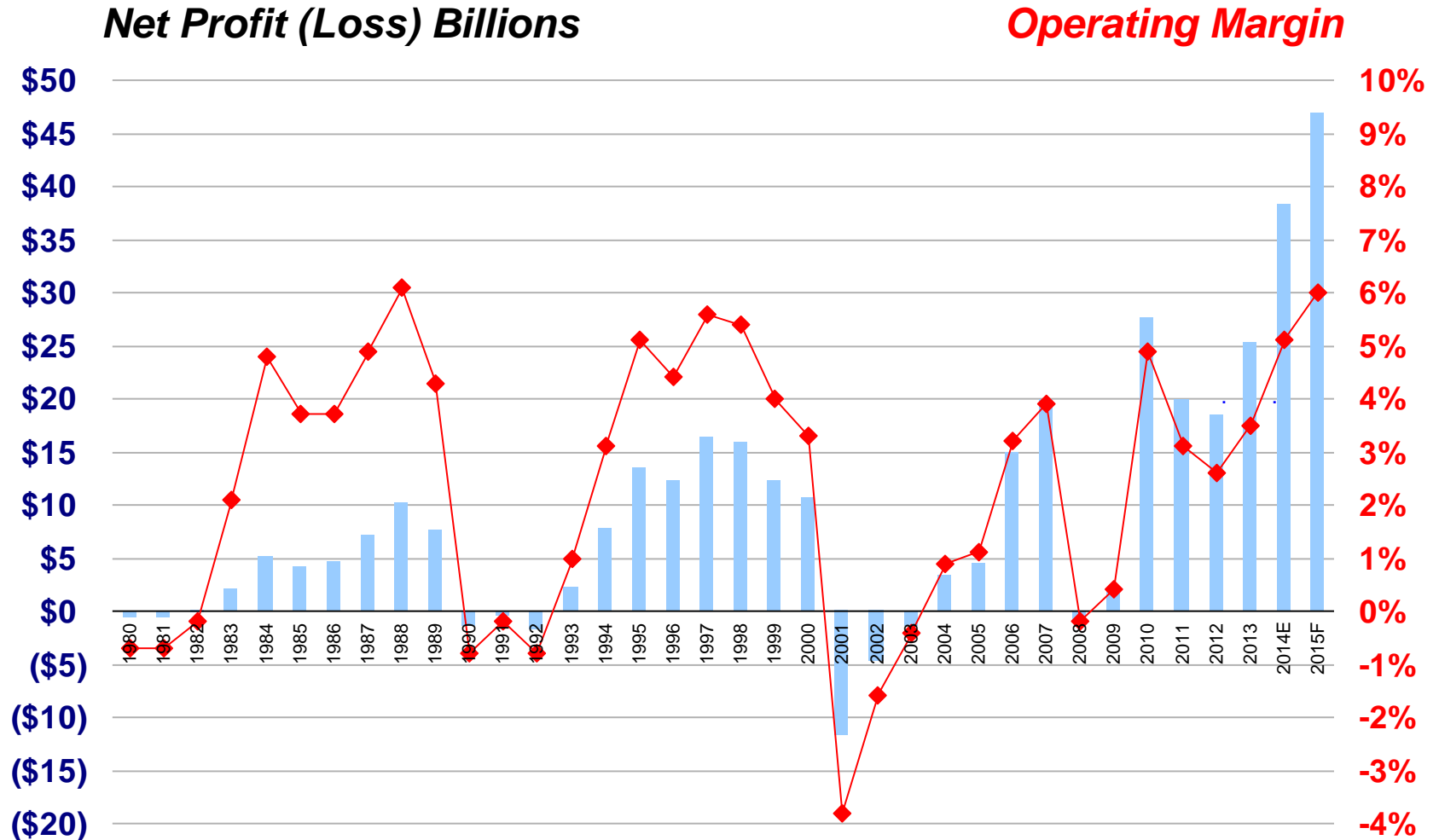
USGC Jan Jet Fuel Price	
2013	\$3.09
2014	\$2.92
2015	\$1.80



Data source: ARC Settlements and Operations statistics <http://www.arccorp.com/news/sales-document-statistics-archive.jsp>

Average international fares at lowest level in 4 years

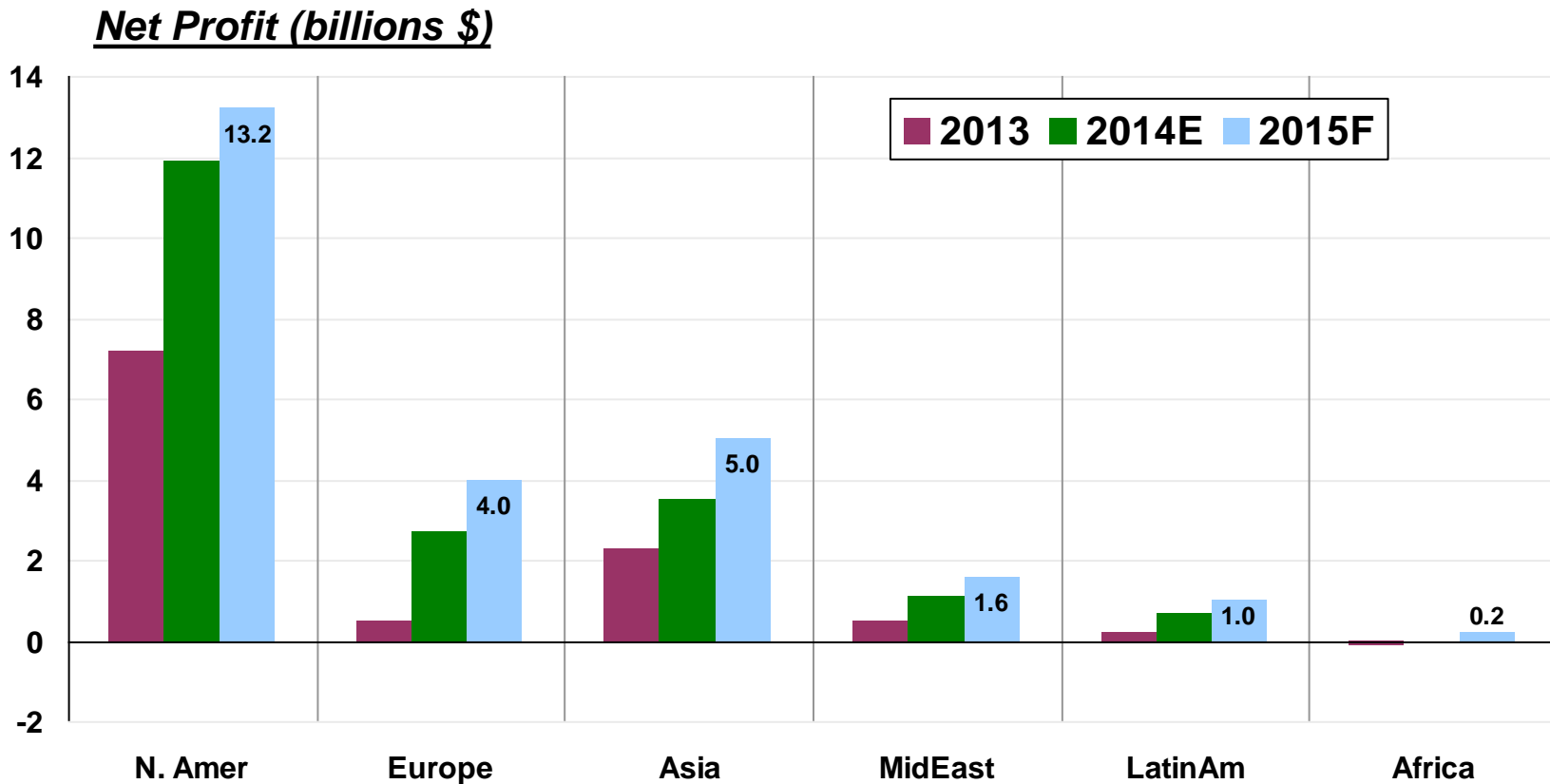
Airline industry operating profitability



Source: ICAO (1980 – 2013) and IATA December 2014 (2014-15)

Airlines managing economic uncertainty, volatile fuel prices

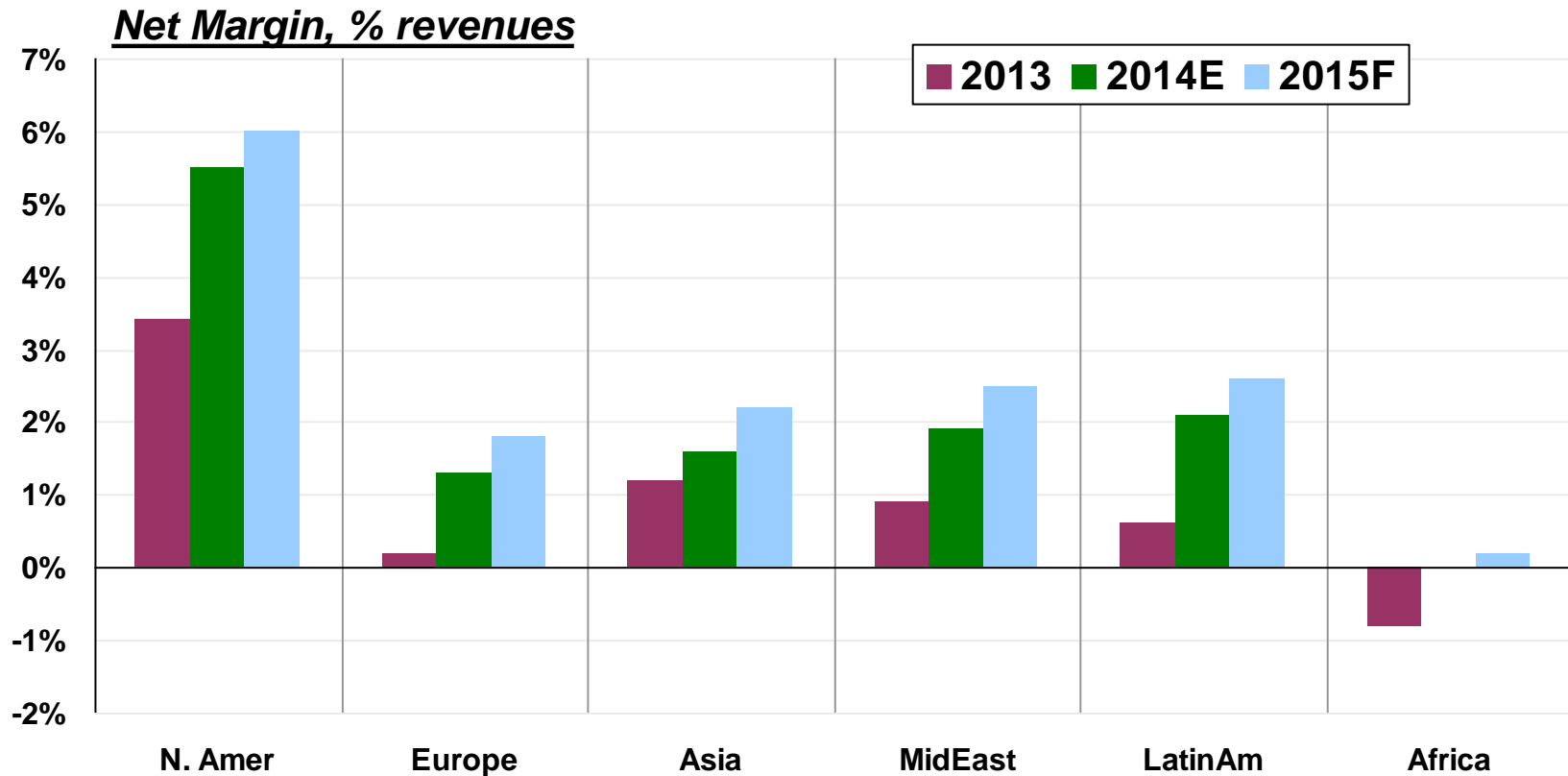
Regional profitability outlook



Source: IATA, December 2014

North America leading industry profitability

Regional margin performance



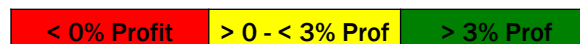
Source: IATA, December 2014

Americas leading industry profit margins

Airline Operating Profitability

	Company Name	2013	2014Q1	2014Q2	2014Q3	2014Q4	2015	2016
North America	DELTA	Green	Green	Green	Green	Green	Green	Green
	AMERICAN	Green	Green	Green	Green	Green	Green	Green
	UNITED	Green	Red	Green	Green	Green	Green	Green
	JETBLUE	Green	Green	Green	Green	Green	Green	Green
	SOUTHWEST	Green	Green	Green	Green	Green	Green	Green
	ALASKA	Green	Green	Green	Green	Green	Green	Green
	HAWAIIAN	Green	Yellow	Green	Green	Green	Green	Green
	REPUBLIC	Green	Green	Green	Green	Green	Green	Green
	SPIRIT	Green	Green	Green	Green	Green	Green	Green
	ALLEGiant	Green	Green	Green	Green	Green	Green	Green
	WESTJET	Green	Green	Green	Green	Green	Green	Green
AIR CANADA	Green	Red	Green	Green	Green	Green	Green	
LATAM	AEROMEXICO	Green	Yellow	Yellow	Green	Green	Green	Green
	AVIANCA TACA	Green	Green	Green	Green	White	Green	Green
	COPA	Green	Green	Green	Green	Green	Green	Green
	GOL	Yellow	Green	Yellow	Green	Green	Green	Green
	LATAM	Green	Yellow	Yellow	Green	Green	Green	Green
Asia Pacific	CEBU	Green	Green	Green	Red	White	Green	Green
	THAI	Yellow	Red	Red	Red	White	Green	Green
	MALAYSIAN	Red	Red	Red	Red	White	Green	Green
	ASIANA AIRLINES	Red	Red	Yellow	Green	White	Green	Green
	GARUDA INDONESIA	Yellow	Red	Red	Red	White	Green	Green
	KOREAN	Red	Yellow	Green	Green	White	Green	Green
	SINGAPORE	Yellow	Red	Yellow	Green	Green	Green	Green
	PHILIPPINE AIRLINES	Red	Red	Green	Red	White	Green	Green
	ANA	Green	Red	Yellow	Green	Green	Green	Green
	JAPAN AIRLINES	Green	Green	Green	Green	Green	Green	Green
	QANTAS*	Red	Red	Red	White	White	Green	Green
	VIRGIN AUSTRALIA*	Red	Red	Red	Red	Red	Green	Green
	AIR NEW ZEALAND*	Green	Green	Green	Green	Green	Green	Green
	JET AIRWAYS**	Red	Red	Red	Red	White	Green	Green
SPICEJET-B	Red	Red	Red	White	White	Red	Green	

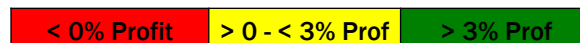
Excluding unusual items
* 6-month results



Airline Operating Profitability

Company Name		2013	2014Q1	2014Q2	2014Q3	2014Q4	2015	2016
China	AIR CHINA	Green	Red	Red	Green	White	Green	Green
	CHINA SOUTHERN	Yellow	Red	Red	Green	White	Green	Green
	HAINAN	Green	Yellow	Red	Green	White	Green	White
	SHANDONG	Green	Green	Red	Green	White	White	White
	CHINA AIR	Red	Red	Red	Green	White	Green	Green
	EVA	Yellow	Red	Green	Green	White	Green	Green
	CHINA EASTERN*	Yellow	Red	Green	White	White	Green	Green
	CATHAY PACIFIC*	Green	Green	Green	White	White	Green	Green
Europe	AIR FRANCE / KLM	Yellow	Red	Yellow	Green	Red	Yellow	Green
	IAG	Green	Red	Green	Green	White	Green	Green
	LUFTHANSA	Green	Red	Green	Green	White	Green	Green
	TURKISH	Green	Red	Green	Green	White	Green	Green
	NORWEGIAN	Green	Red	Red	Green	Red	Green	Green
	AIR BERLIN	Red	Red	Red	Green	White	Red	Yellow
	ICELANDAIR	Green	Red	Green	Green	Red	White	White
	AEROFLOT	Green	White	White	Green	White	Green	Green
	TRANSAERO	Yellow	Yellow	Yellow	Yellow	White	Green	White
	Utair*	White	White	White	White	White	Green	White
	RYANAIR	Green	Red	Green	Green	Green	Green	Green
	SAS	Green	Red	Green	Green	White	Green	Green
	EASYJET*	Green	Red	Green	Green	White	Green	Green
AER LINGUS*	Green	Red	Green	White	White	Green	Green	
ME/Afr/ Cargo	JAZEERA AIRWAYS	Green	Green	Green	Green	White	Green	Green
	EL AL	Yellow	Red	Green	Green	White	White	White
	ROYAL JORDANIAN	Red	Red	Green	White	White	White	White
	COMAIR*	Green	Green	Green	White	White	White	White
	KENYA AIRWAYS*	Red	Red	Red	Red	White	Green	White
	FEDEX	Green	Green	Green	Green	Green	Green	Green
	DHL	Green	Green	Green	Green	White	Green	Green
	UPS	Green	Green	Green	Green	Green	Green	Green
ATLAS AIR	Green	Green	Green	Green	Green	Green	Green	

Excluding unusual items
* 6-month results



Business Environment – Summary

- ***Baseline outlook for improving global economic 2015+***
- ***High oil price volatility returns, price outlook for recovery into mid-term***
- ***Global passenger traffic growing at/above long-term average rate; emerging markets leading***
- ***Airlines adding capacity in response to traffic growth; adjusting networks with focus on profitability***
- ***Air cargo traffic recovering, market capacity metrics improving***
- ***Airline profit outlook rising, North American airlines leading***
- ***Airlines restructuring networks, fleets, partnerships, and driving down controllable costs***

Industry is healthy despite ever-present challenges